Metalogix

Archive Manager Exchange Ed - Advanced Install

Version 7.2

MS Exchange Server 2010

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Introduction

About this book

This manual gives an introduction to Archive Manager Exchange Edition the email archiving tool. In this manual we will explain how to **manually** install and configure Archive Manager Exchange Edition for Microsoft Exchange Server 2010 using the light setup.

Besides the light setup, Archive Manager can be installed by the *Install package* which performs all pre-requisite tasks and necessary configuration itself (see the short "Archive Manager Quick Start Guide").

In this manual we use Windows Server 2008 R2 SP1 as OS.

Prerequisites knowledge

You should have a working knowledge of Microsoft Exchange Server 2010 and of the administrative tasks in Windows Server 2012/2008.

You should also have an understanding of Microsoft SQL Server or ORACLE Database Server, depending on which you will be using.

Knowledge of Microsoft Outlook and IIS would be of help, too.

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Getting started

This chapter describes the most important basic requirements for successful manual installation of Archive Manager Exchange Edition. Here we will also describe pre-installation tasks the administrator has to perform before installing Archive Manager by the light setup, so please read it carefully.

Besides the light setup, Archive Manager can be installed by the *Install package* which performs all pre-requisite tasks and necessary configuration itself (see the short "Archive Manager Quick Start Guide").

What is Archive Manager Exchange Edition

Archive Manager is a software solution for email archiving. It enables archive mail into a pre-defined store even with a different retention times. Any email can be restored any time along with its attachments. It provides full version management with a possibility to retrieve any of the versions. Moreover, our full-text search engine provides searching through the archives by applying various search criteria.

At archiving, Archive Manager replaces archived emails on the MS Exchange server with a shortcut, which takes up much less space. Messages remain available, however, and end-users can work with them as usual. This helps you to increase capacity on your MS Exchange server. Furthermore, our OWA support lets you access archived e-mails easily without any reconfiguration via Web Access. Thanks to the "shortcut delay" feature even Blackberry users can read their archived emails. Archive Manager also offers an Offline Folder Service for those who wish to access their mails while on the road. Emails can be copied into the Offline Folder using a standard synchronization process. Archive Manager comes with a plug-in for MS Outlook that gives users authorized by the administrator the ability to control certain archive functions themselves.

The system is fully automated and the administrator needs to specify the attributes of its behavior only.

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Process of archiving with Archive Manager

Archive Manager Exchange Edition transfers the desired email with its attachments to the HSM system. It is the HSM system that takes care of storing and retrieving emails and their attachments. The HSM system works with a database because the information contained in the shortcut is stored either in an ORACLE or an MS SQL database. The HSM system passes down this email and its attachments to a store specified by the administrator, whereas the email can be compressed "on the fly". A shortcut of a few kilobytes only remains at its original location. This shortcut includes information about the new location of the archived email. The only difference a user notices is that the shortcut is displayed with a slightly modified icon.

Users may work with archived emails and their attachments as usual. This means that when an archived email is reopened, Archive Manager passes the information contained in the shortcut to the HSM system. Then the HSM system restores the respective email and its attachments from the store. Yet, for users it is as if they were working in their normal environment.

The HSM Server (Hierarchical Storage Management Server)

The HSM Server (i.e. the computer where the HSM system is installed), as a part of Archive Manager, takes care of saving and securing archived documents. It works with a database, either an ORACLE Database or an MS SQL Database.

NOTE: If you are using an ORACLE database, Oracle Data Provider for .NET has to be installed.

When installing Archive Manager Exchange Edition you will be asked to specify a database as well as a database user and password, while configuring the database (see the section "Configuring the database" in the chapter "Post-Installation tasks"). Therefore, a database with a database user must be available before installing Archive Manager. (NOTE: The Archive Manager light setup does not create a database automatically.)

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Database

The database used by Archive Manager has basically four parts: Archive Manager part, HSM part, Users part and Auditing part (optional).

Archive Manager light setup does NOT create databases automatically.

Archive Manager part	One database can include all these parts. However, if you plan to archive 1.000.000 and more emails, we recommend creating a separate databases for all three parts. These databases are then easier to back up and are not growing quickly.
HSM part	
Users	

Auditing part	If auditing feature will be used, a separate database for auditing part must be created.

NOTE: The owner can be the same for all databases or you can create different owner for each database.

Databases with the database user(s) (who, in addition, should be the owner(s) of these databases) have to be available before installing Archive Manager, because you will be asked for this data during the installation of Archive Manager. In this manual we use one database for Archive Manager (exchangeDB), one for HSM (hsmDB), one for Users (mtRolesDB) and one for Auditing (auditingDB). The same user for all is “srv_exchange”.

Supported databases:

- MS SQL 2008 and higher
- ORACLE 11g and 12c

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Creation of a database with a database user in MS SQL 2012 is described in "Addendum – Creating an MS SQL database with a database user".

NOTE: If you prefer working with an ORACLE Database, make sure to have similar data (database, database user, password, owner of the schema) available during the installation of Archive Manager Exchange Edition.

Hardware requirements

The minimal configuration:

- Intel P4 2 GHz processor
- 2 GB RAM

Recommended configuration:

- Dual Xeon
- 4 GB RAM

The application, log files and cache folders require 10 GB of HDD space. The space for the database and the file store must be calculated from the amount of the messages.

Software requirements

Archive Manager Exchange Edition can be installed on:

- Windows 2008 R2 SP1 / 2012

NOTE: In case of Windows Server 2008, check the "Static Content" check box under Server Manager -> Server Roles-> Web Server (IIS) -> Role Services.

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Exchange 2010 requirements

Archive Manager Exchange Edition supports archiving from Exchange 2010 Server. However the following prerequisites must be met:

- Exchange Server 2010
- Public Folder database – it is necessary to have a Public Folder database in the organization because the Organization Forms Library resides in the System Folders (which is part of public folders) and the Organizational Forms Library is necessary to ensure the transparent access to archived emails from Outlook (see the "Creating and mounting a Public Folder database" and "Creating an Organizational forms library database" section.)

Pre-installation tasks

In this part we will describe which pre-installation steps should be taken in order to prepare all that is needed for installing Archive Manager Exchange Edition correctly.

Before installing Archive Manager you need to:

- Create database(s) with a database user (owner of the table) so that they are available when installing Archive Manager (Creation of a database with a database user in MS SQL 2012 is described in "Addendum – Creating an MS SQL database with a database user");
- Create a super-user account (see the section "Super-user" as well as the section "Creating a super-user account" and "Creating a mailbox for the super-user");
- In case that you will be using ORACLE database, you need to install on the Archive Manager Server computer the ORACLE Data Provide for .NET (see the section "The Archive Manager Server")
- Install **Outlook 2007 or higher** on your Archive Manager server (see the section "The Archive Manager Server");
- Make sure to install IIS. In the case that Archive Manager will be running on an:
  a) MS Windows Server 2012 then follow the steps as described in the section "Installation of IIS on a MS Windows Server 2012"
  b) MS Windows Server 2008 (R2 SP1) then follow the steps as described in the section "Installation of IIS on a MS Windows Server 2008 (R2 SP1)"

IMPORTANT NOTE: If you plan to install Archive Manager Exchange Edition on a server with Microsoft

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CRM or SharePoint, you have to manually configure Archive Manager web applications. It is necessary, because these applications are overtaking port 80 in IIS. Archive Manager needs port 80 free, otherwise it will not be able to retrieve archived data to the users. For more information on how to configure Archive Manager web applications in such cases see the "Archive Manager Exchange Edition Configuration on the secondary Website" manual.

- Install .NET Framework 3.5 and 4.5 (see the section "Installation of the .NET Framework");
- Assign administrator rights on the Archive Manager Server to the super-user (see the section "Assigning administrator rights to the super-user over the Archive Manager Server");
- Manage super-user rights with ADSI Edit tool (see the section "Assigning rights to the super-user over the Configuration Container");
- Grant the super-user permissions in MS Exchange Server (see the section "Granting the super-user permissions in MS Exchange Server");
- Grant the super-user impersonation permissions in Exchange Server (see the section "Granting super-user impersonation permission in the Exchange Server");

  NOTE: These permissions are necessary only if you plan to access archived emails via OWA.
- Assign DCOM rights (see the section "Assigning DCOM rights on Windows Server 2008 / 2012");
- Create a Public folder database on the MS Exchange Server (see the section "Creating and mounting a Public folder database");
- Create the Organizational forms library (folder) on the MS Exchange Server (see the section "Creating an Organizational forms library" as well as the section "Setting up language for the forms folder");
- Assign owner rights to the super-user over the Organizational forms library on the MS Exchange Server (see the section "Assigning owner rights to the super-user over the Organizational Forms library");
- When you are done with installation, please don't forget to synchronize the super-user as well (see the section "Enterprise Manager – Initial Configuration")

Also, attached is a check-list (see the section "Addendum") specifying which data you should collect before installing Archive Manager. For successful installation, we recommend going through that list first.

IMPORTANT NOTE: Automated archiving is designed for groups. It is therefore crucial to have Active Directory groups synchronized with Archive Manager, or at least to create new Archive Manager groups using the **Addressbook Manager** or the *Initial Configuration wizard* (see the section "Enterprise

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Manager – Initial Configuration"). In Archive Manager, jobs (automated archiving) apply to groups. Mailboxes not included in any group can be archived manually only.

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Super-user

Another important thing for the administrator to do before installing Archive Manager is to create an account with a mailbox under which Archive Manager will be running. This can be done simply by adding a new user in **Active Directory Users and Computers**. Give that account a relevant name – throughout this manual we will call this account a super-user account, and will be referred to as the **srv_exchange** user (see the next section “Creating a super-user account”).

Why is this super-user necessary? Because at archiving, emails and their attachments are taken from your MS Exchange server and they are placed in the HSM storage, which is another, cheaper, location. Only a shortcut is left behind on the MS Exchange server. This means that the original email and its attachments are replaced with a shortcut. The services that do this replacing process run under this super-user account. That is why this account must be given certain additional rights on your MS Exchange Server.

This super-user must be added to the local administrators of your Archive Manager Server. As mentioned above, this super-user account must be given permissions to mailboxes on your Exchange Server. Those permissions as well as owner rights must be given, in order to enable the archiving

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process. Later we will describe how to assign permissions over the mailboxes to the super-user.

IMPORTANT NOTE: You need to create a super-user account with a mailbox and with all additional rights, which will be described later, before running the installation of Archive Manager, since you will be asked for its name and password when running the Archive Manager Setup. **Please keep in mind that the password of this super-user must not be blank**!

Creating a super-user account

Note that it may take some time for the super-user account to be registered in **Active Directory Users and Computers**. The account cannot be used until the registration is complete. The length of the delay depends on how Exchange Server is set up to replicate recipient information.

To create the super-user account:

1. Click **Start /Programs /Administrative Tools /Active Directory Users and Computers**.
2. In the left pane of the **Active Directory Users and Computers** window, double-click the container where you want to create the **srv_exchange** account.
3. Click the **Action** menu, click **New**, and then **User**. The **New Object –User** window is displayed.
4. Complete the **New Object – User** window (enter **srv_exchange**) and click **Next**.
5. In the next window select the **Password never expires** check box. Enter a password in the **Password** text-box and confirm it in the **Confirm password** text-box.

   NOTE: The password cannot be blank!

   Leave the remaining checkboxes clear:
   User must change password at logon
   User cannot change password
   Account is disabled

   Click **Next** to move to the next screen.
6. Click **Finish** to create the new user.

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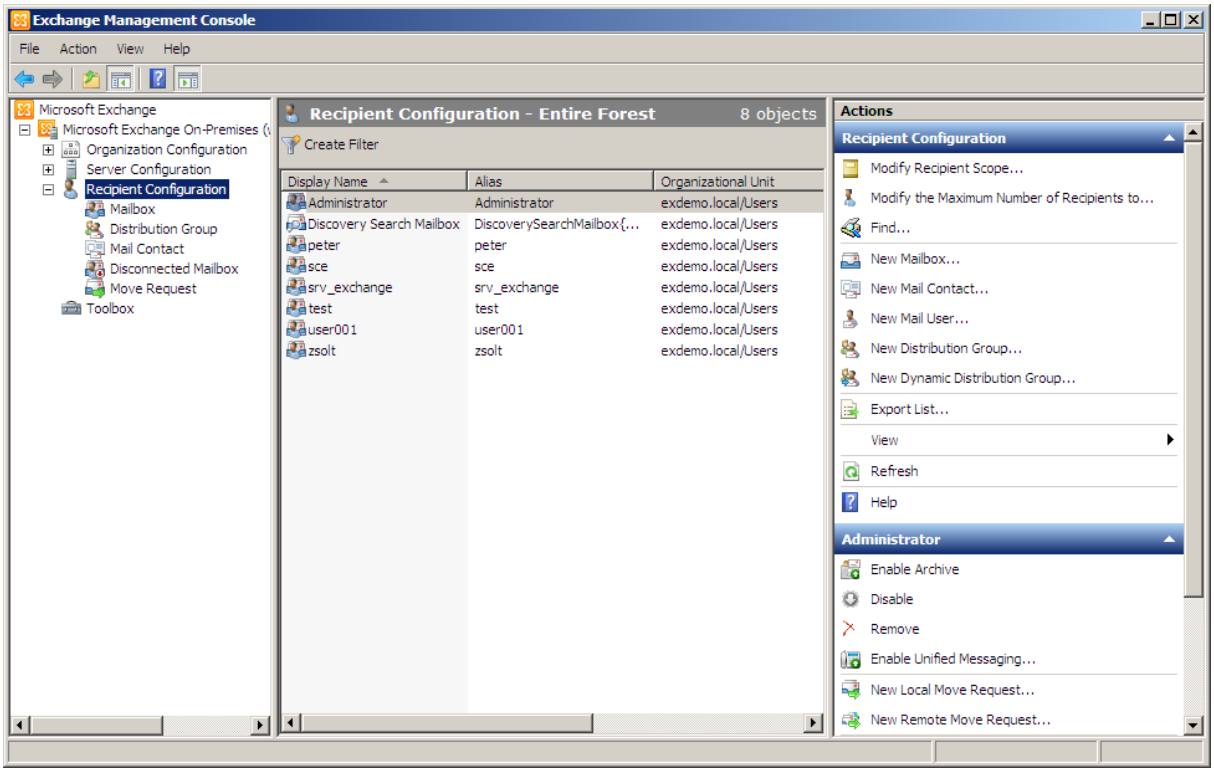
Creating a mailbox for the super-user

As mentioned before the super-user account has to be an account with a mailbox. In the following lines we describe the process of creating a mailbox for this super-user.

1. On your MS Exchange server open the **Exchange Management Console** from **Start** / **Programs** / **Microsoft Exchange Server 2010** / **Exchange Management Console**.
2. In the left pane of the **Exchange Management Console** window select the **Recipient Configuration** node.



3. In the right pane click on the **New Mailbox**.

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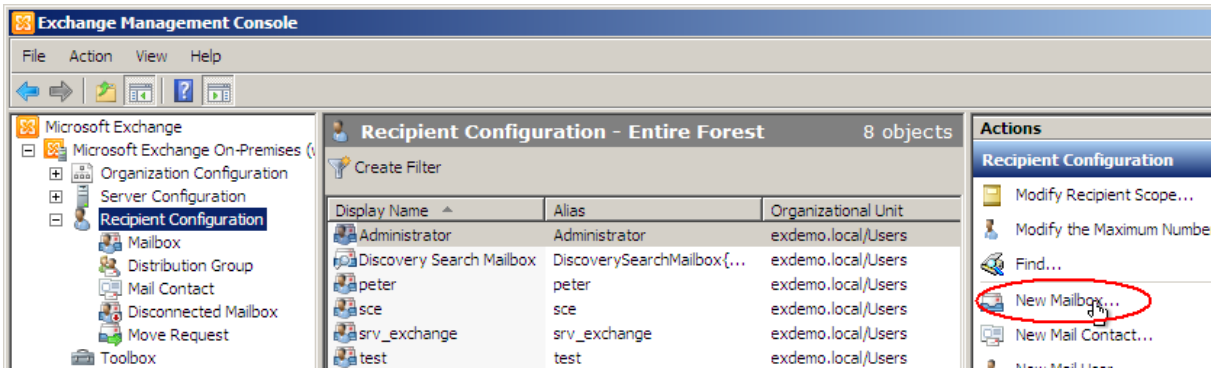
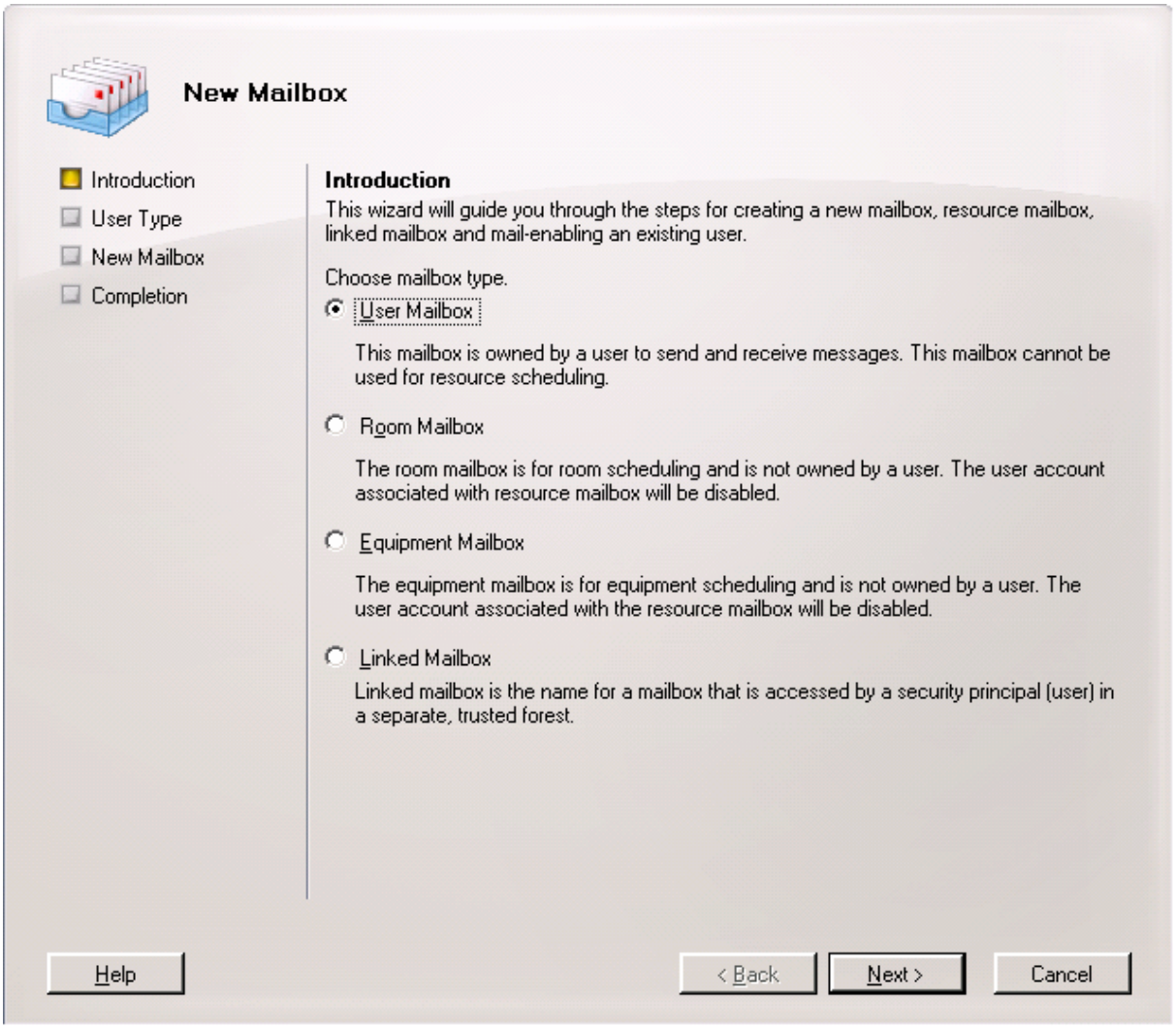


4. **New mailbox** window pops up. Select the **User mailbox** radio button and click **Next**.


New Mailbox
Introduction
User Type
New Mailbox
Completion
Introduction
This wizard will guide you through the steps for creating a new mailbox, resource mailbox, linked mailbox and mail-enabling an existing user.
Choose mailbox type.
User Mailbox
This mailbox is owned by a user to send and receive messages. This mailbox cannot be used for resource scheduling.
Room Mailbox
The room mailbox is for room scheduling and is not owned by a user. The user account associated with resource mailbox will be disabled.
Equipment Mailbox
The equipment mailbox is for equipment scheduling and is not owned by a user. The user account associated with the resource mailbox will be disabled.
Linked Mailbox
Linked mailbox is the name for a mailbox that is accessed by a security principal (user) in a separate, trusted forest.
Help
< Back
Next >
Cancel

5. In the next window switch to the **Existing user** radio button. Click **Add** and locate your super-

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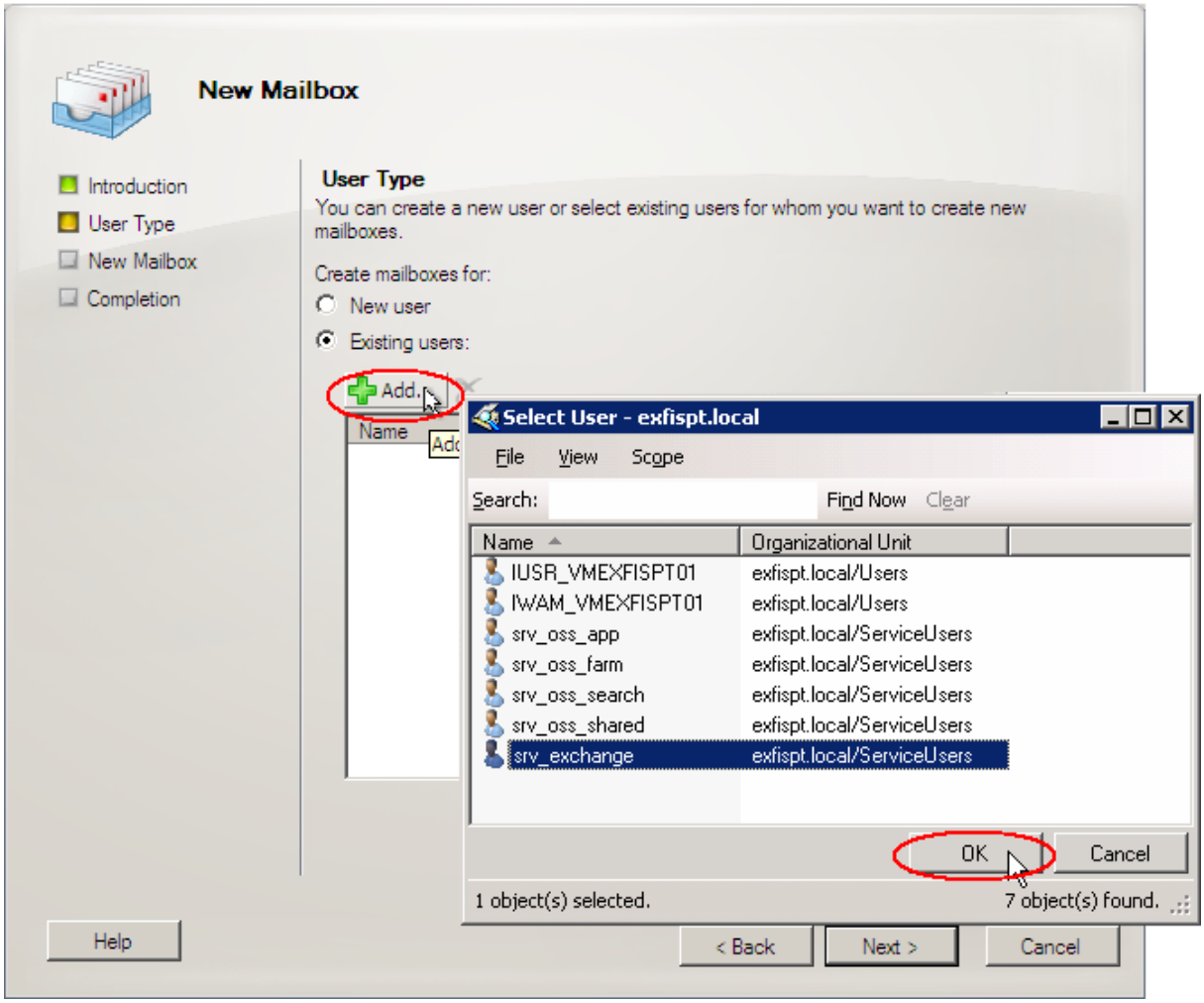
user. Then click **OK**.



6. Click **Next**.
7. In the **Mailbox Settings** window enter the alias for the mailbox user and click **Next**.
8. Click **New** to create the mailbox for the super-user. Then click **Finish**.

The Archive Manager Server

Further, if you are using an ORACLE database, you need to install the ORACLE Data Provider for .NET (available on ORACLE install CD).

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Outlook

Your Archive Manager Server will communicate with your MS Exchange Server via MAPI. To provide your Archive Manager server with MAPI, install Outlook 2016 (32bit) / 2013 (32bit) / 2010 (32bit) / 2007 on the Archive Manager server (32bit and 64bit OS) – full UNICODE compatibility.

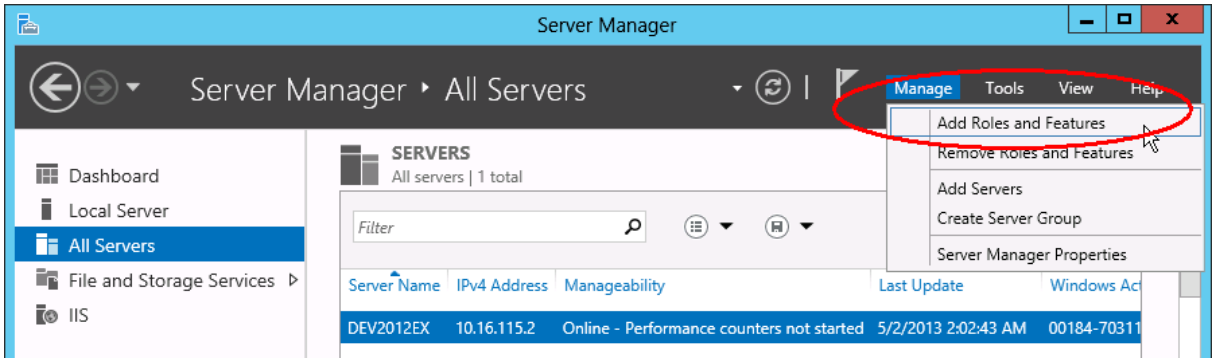
NOTE: Archive Manager and Exchange server must be separate machines.

Installation of IIS on MS Windows Server 2012

Let's say your archiving software is running on a MS Windows Server 2012. Then you need to install Internet Information Services (IIS). Upon installation of Internet Information Services (IIS) you need to enable Active Server Pages as well as ASP.NET 2.0 and 4.0.

To install Internet Information Services (IIS):

1. Click **Start /Administrative Tools** and select **Server Manager**.
2. Click **Manage / Add Roles and Features**.



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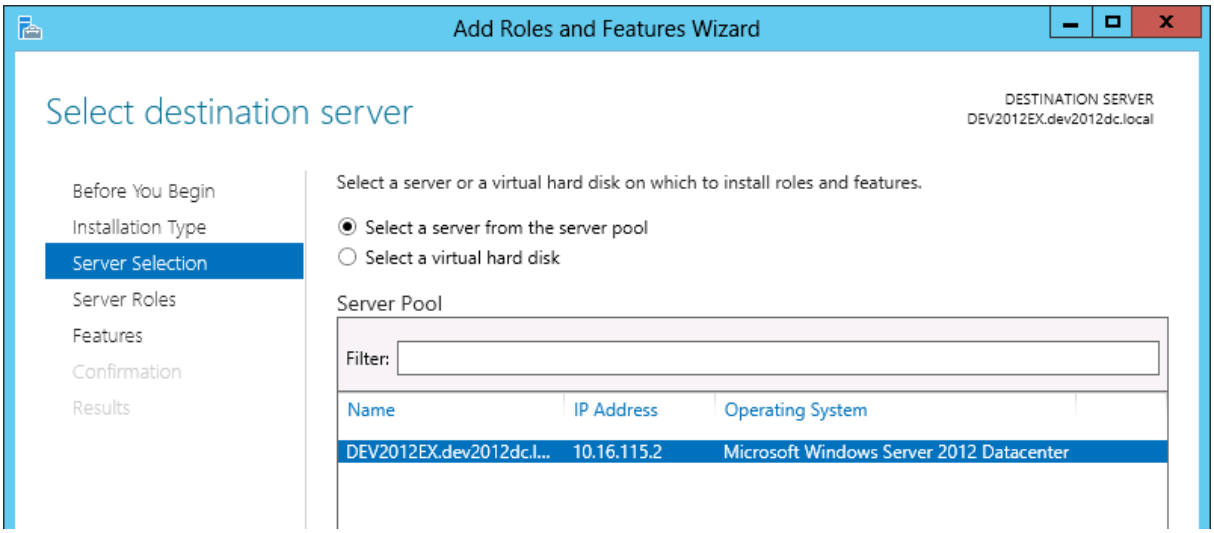
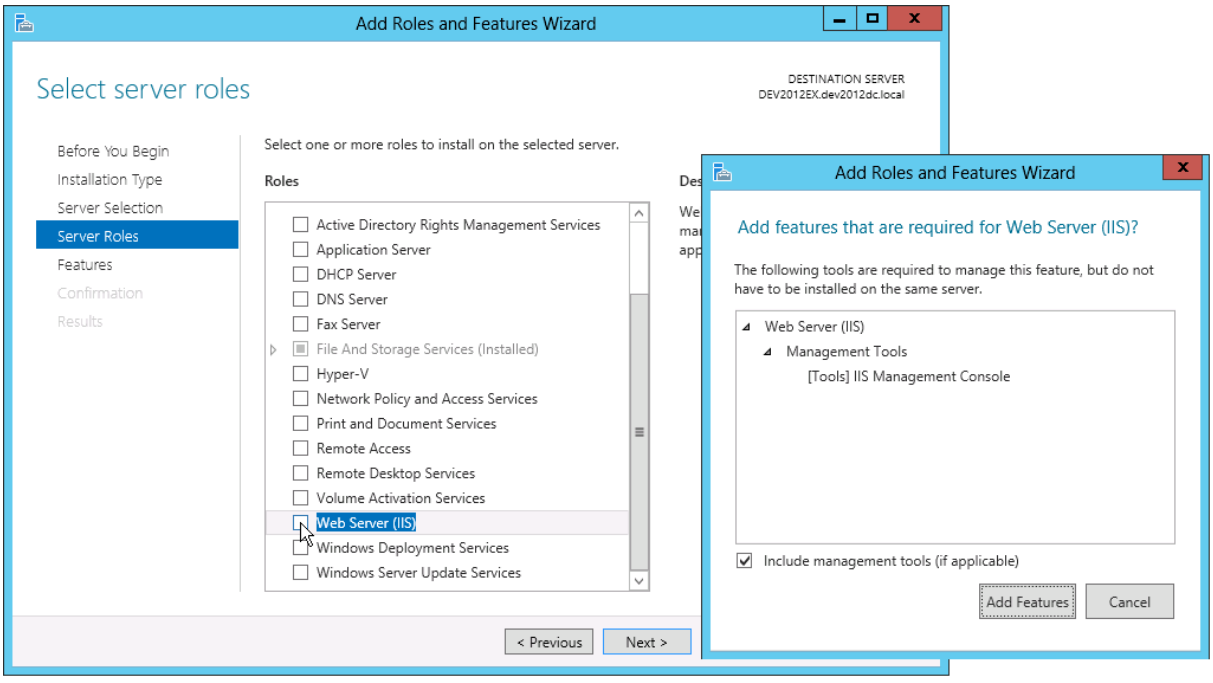
3. Click **Next** and **Next** again. In the **Select destination server** make sure the Archive Manager server is selected and click **Next**.



4. Select **Web Server (IIS)** role. In the pop-up leave the **Include management tools** check box selected and click **Add Features**. Then keep clicking **Next** until the **Features** dialog.



5. Leave the default features selected plus select the following:

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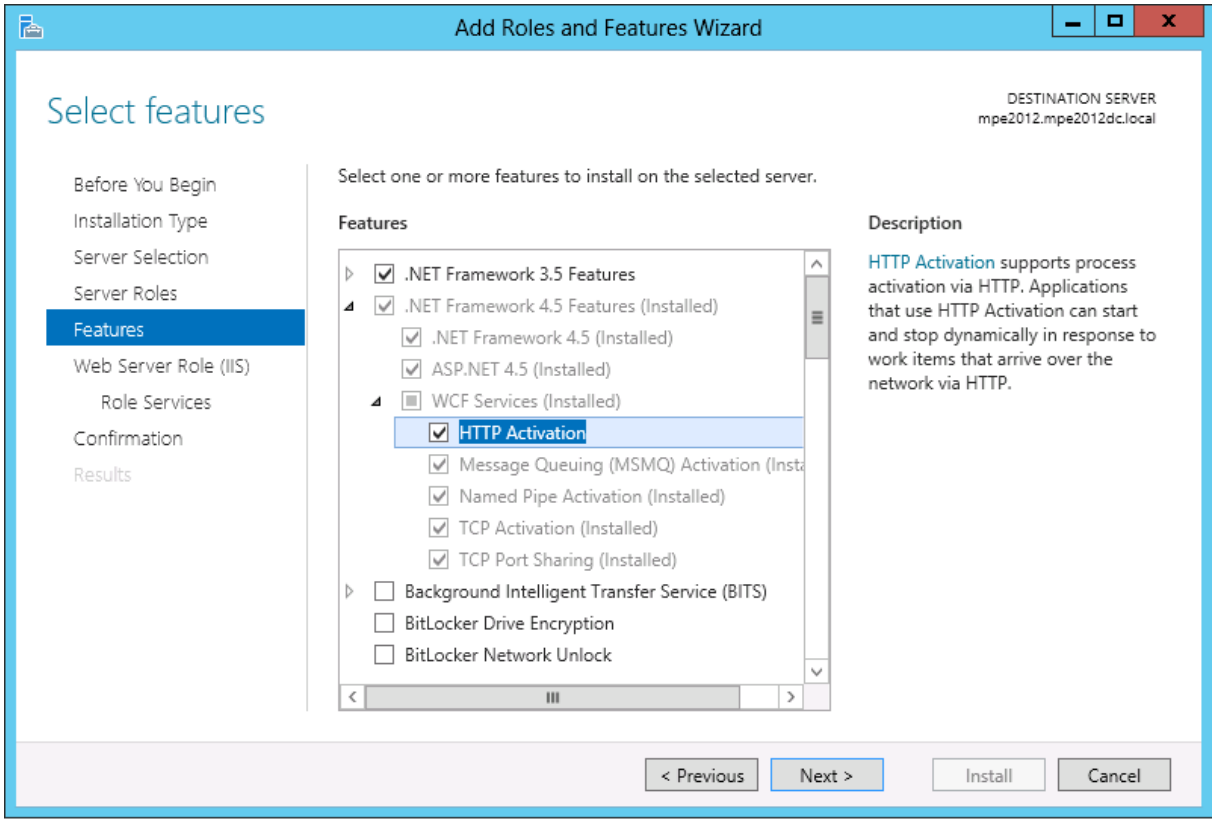
- .NET Framework 3.5 Features
- .NET Framework 4.5 Features / .NET Framework 4.5
- .NET Framework 4.5 Features / ASP.NET 4.5
- .NET Framework 4.5 Features / WCF Services (all checkboxes under this item)



6. Click **Next** twice. On the **Roles Services** leave the default role services selected, plus select following:

- Web Server / Performance / Dynamic Content Compression
- Web Server / Security / Windows Authentication
- Web Server / Web Server / Application Development / .NET Extensibility 3.5

  / .NET Extensibility 4.5

  / ASP.NET 3.5

  / ASP.NET 4.5
- Web Server / Management Tools / IIS 6 Management Compatibility / IIS 6 Metabase

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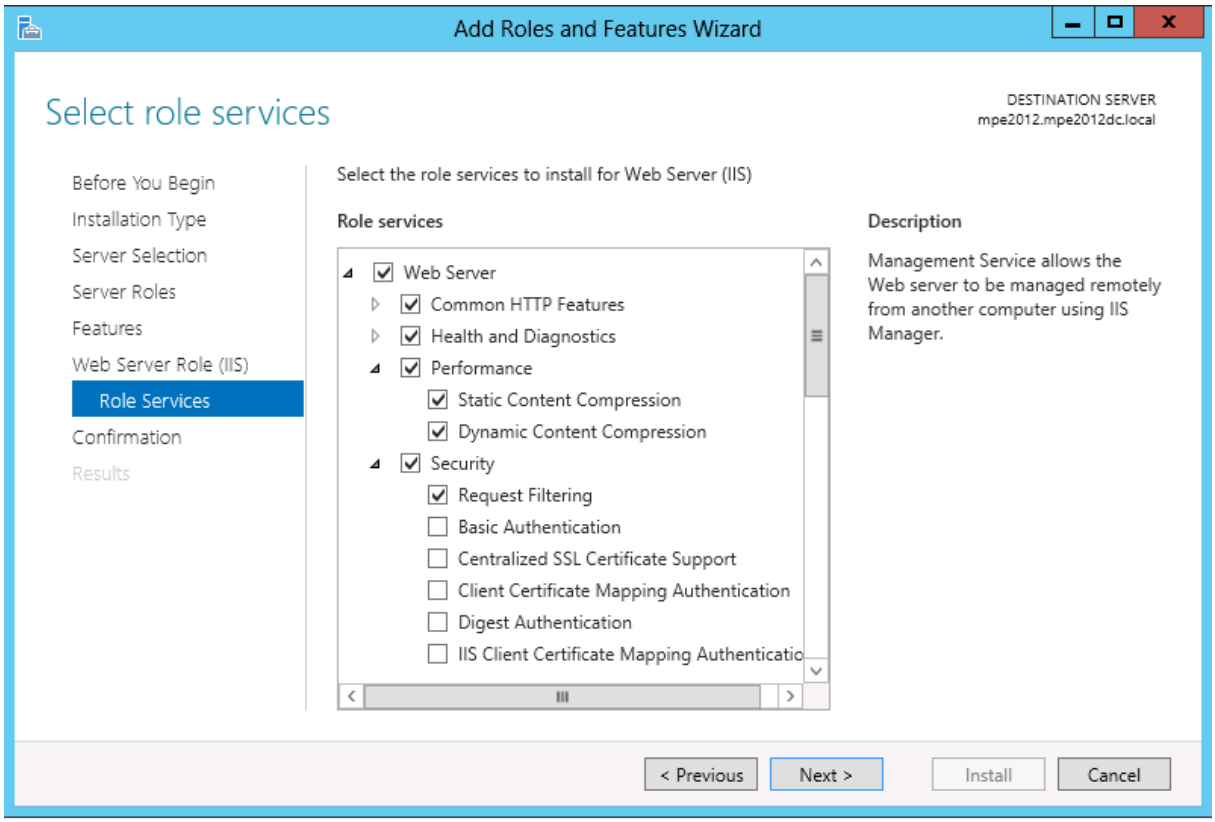
- Web Server / Management Tools / Management Service

Click Next, then Install.



Upon installation of **Internet Information Services (IIS)** you need to enable **Web Service Extensions ASP.NET v2.0** and **4.0**. Follow these steps:

1. Click **Start /Administrative Tools /Internet Information Services (IIS) Manager**. Select server node and open the **ISAPI and CGI Restrictions** feature.

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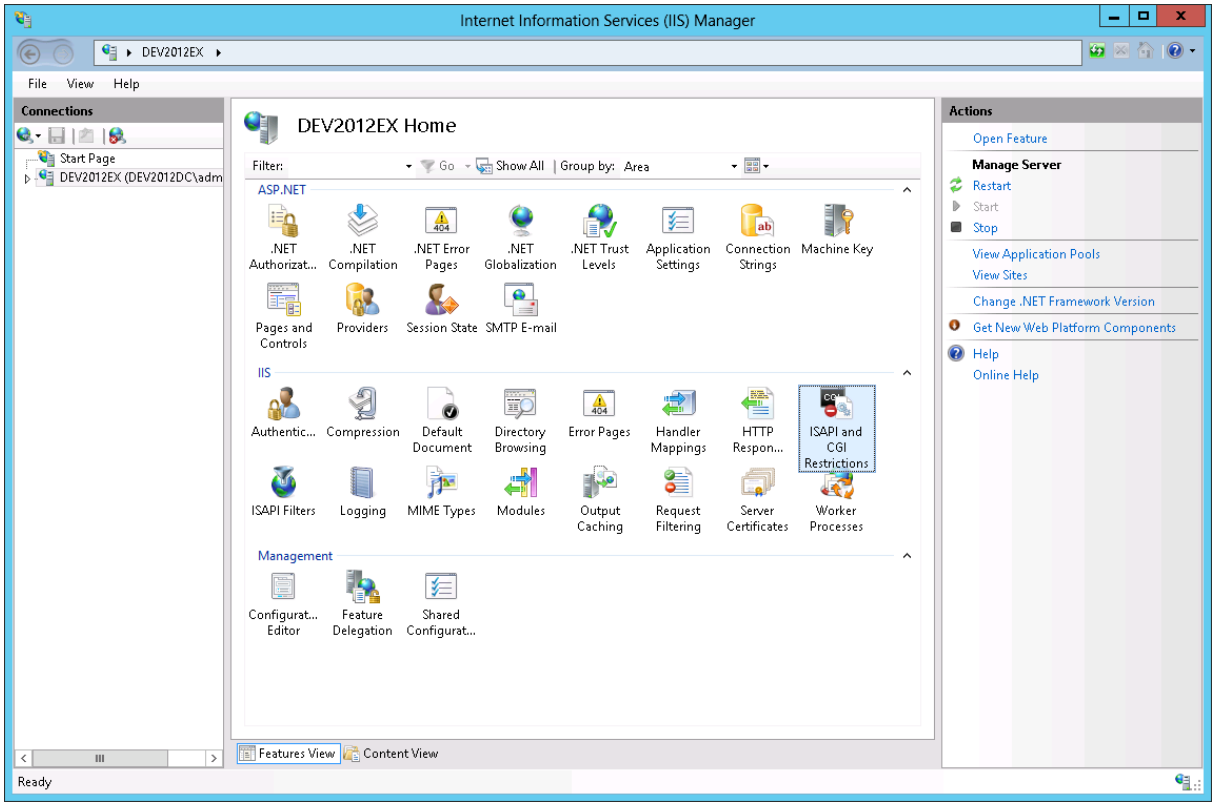
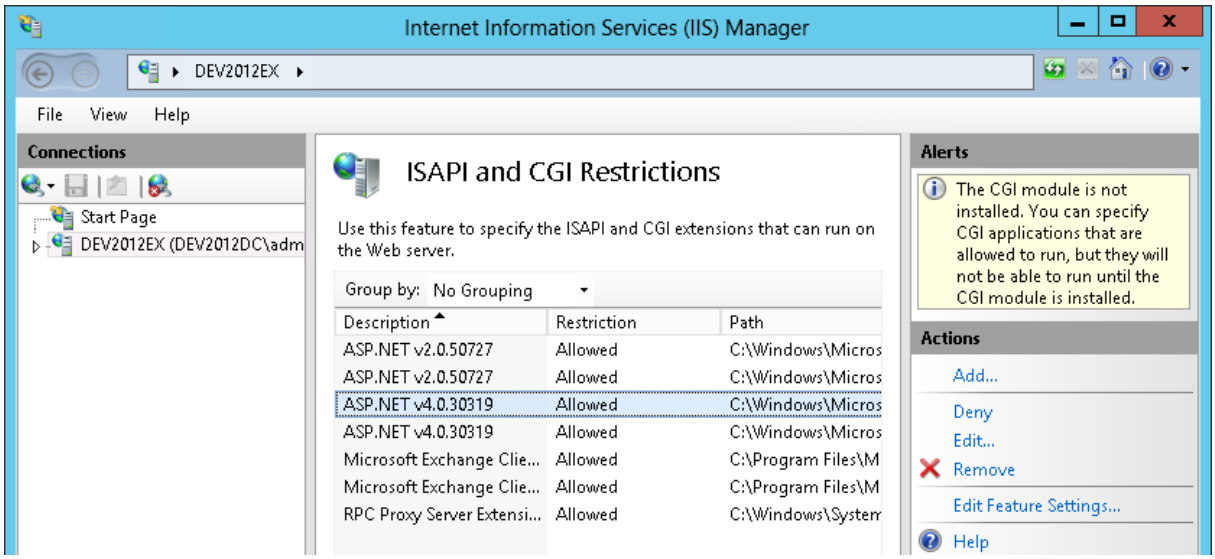


2. Check if **ASP.NET v2.0** and **4.0** ISAPI extensions are installed and allowed.


Internet Information Services (IIS) Manager
DEV2012EX
File View Help
Connections
Start Page
DEV2012EX (DEV2012DC\adm
ISAPI and CGI Restrictions
Use this feature to specify the ISAPI and CGI extensions that can run on the Web server.
Group by: No Grouping
Description
Restriction
Path
ASP.NET v2.0.50727 Allowed C:\Windows\Micros
ASP.NET v2.0.50727 Allowed C:\Windows\Micros
ASP.NET v4.0.30319 Allowed C:\Windows\Micros
ASP.NET v4.0.30319 Allowed C:\Windows\Micros
Microsoft Exchange Clie... Allowed C:\Program Files\M
Microsoft Exchange Clie... Allowed C:\Program Files\M
RPC Proxy Server Extensi... Allowed C:\Windows\System
Alerts
The CGI module is not installed. You can specify CGI applications that are allowed to run, but they will not be able to run until the CGI module is installed.
Actions
Add...
Deny
Edit...
Remove
Edit Feature Settings...
Help

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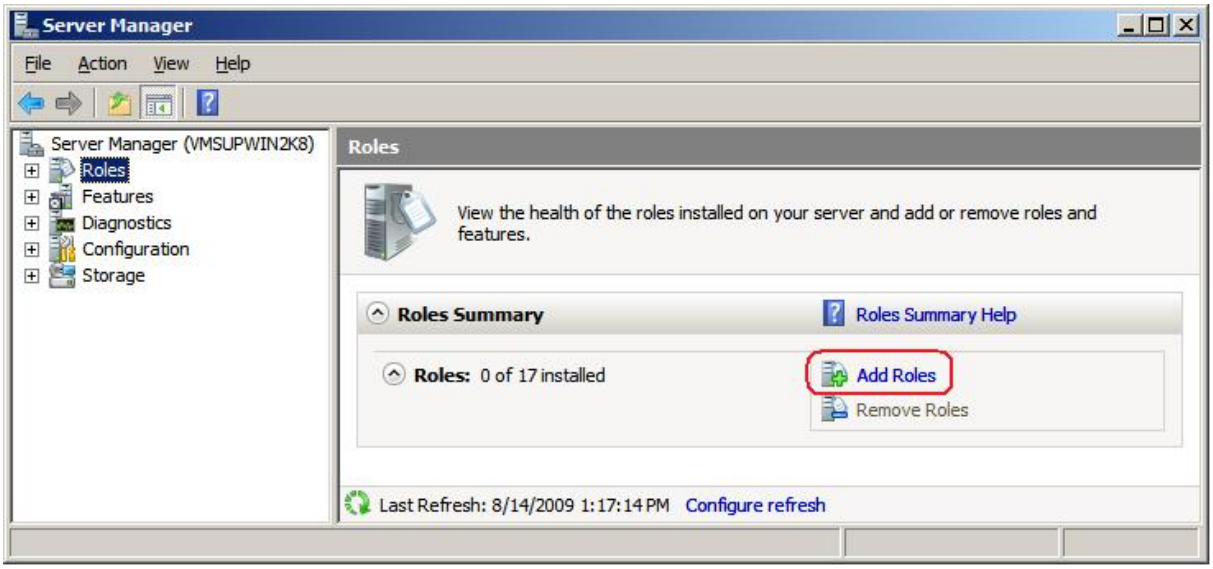
Installation of IIS on MS Windows Server 2008 (R2 SP1)

Let's say your archiving software is running on a MS Windows Server 2008 (R2 SP1). Then you need to install Internet Information Services (IIS) and add .NET Framework 3.5 feature. Upon installation of Internet Information Services (IIS) and adding the .NET Framework you need to enable Active Server Pages as well as ASP.NET 2.0 and 4.0.

To install Internet Information Services (IIS):

1. Click **Start /Settings /Control Panel /Administrative Tools** and select **Server Manager**.
2. Click on the **Roles** node. Click on **Add Roles** link on the right pane.



3. Select the **Web Server (IIS)** role. Click **Next**.

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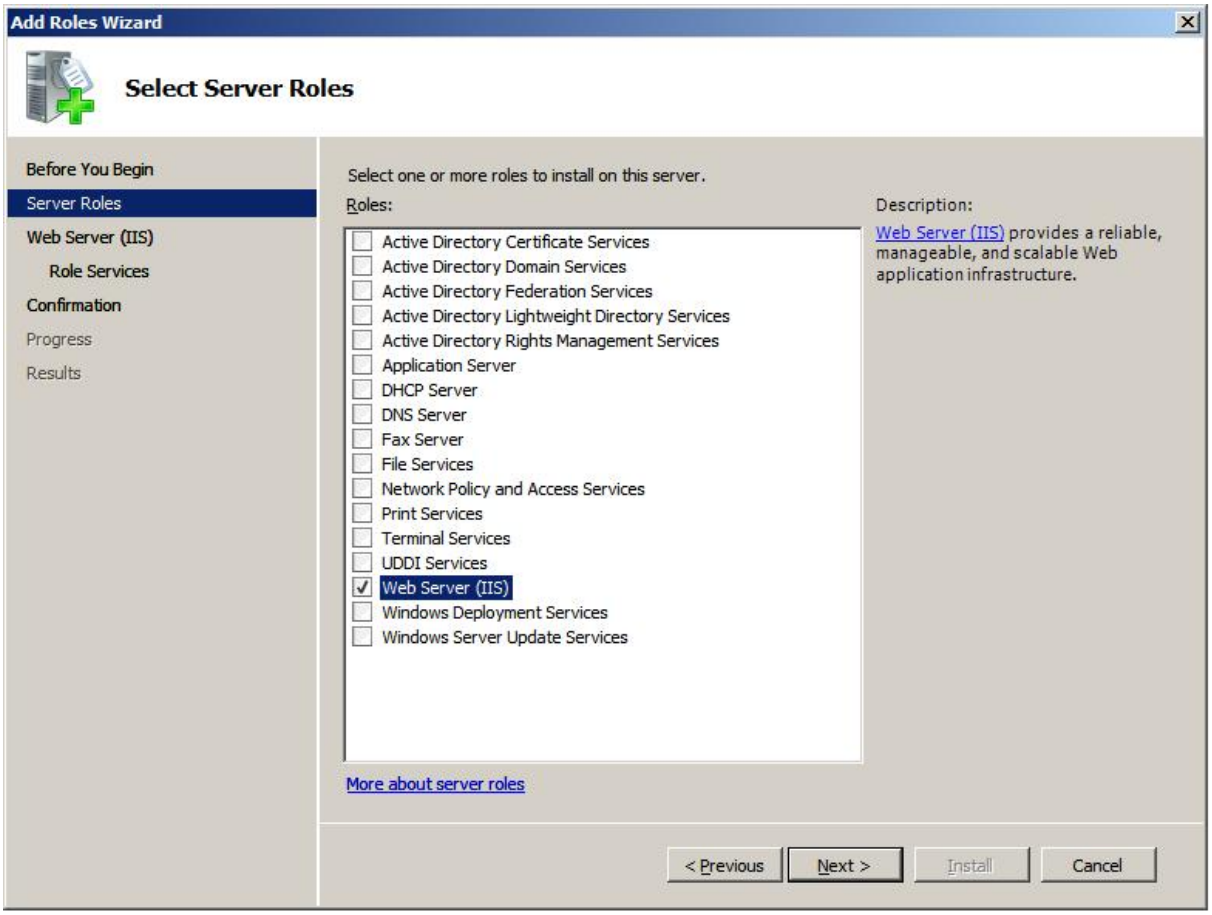
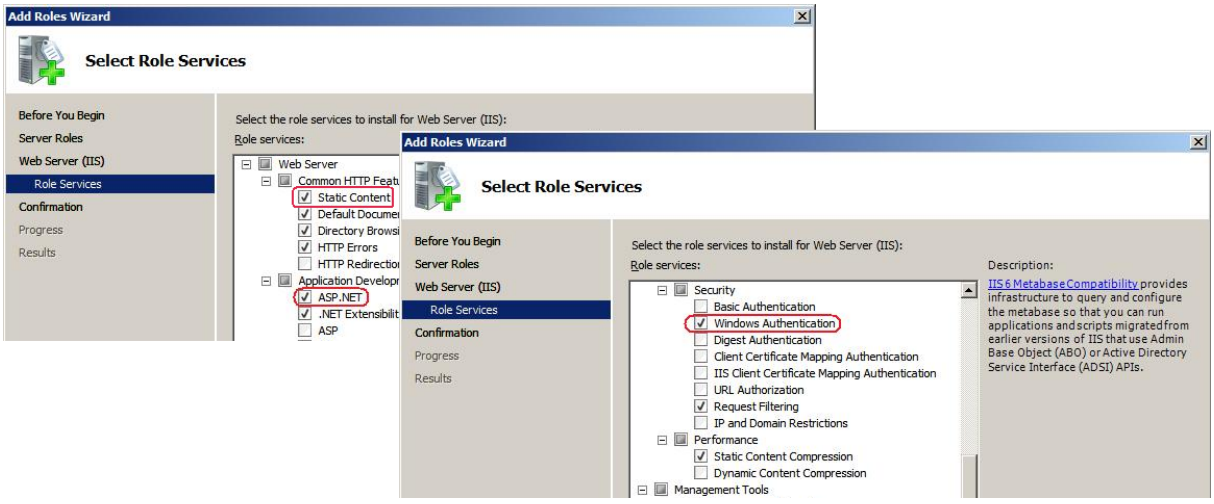


4. Leave the default role services selected, plus select following: **ASP.NET**, **Static Content** and **Windows Authentication**. Click **Next**.



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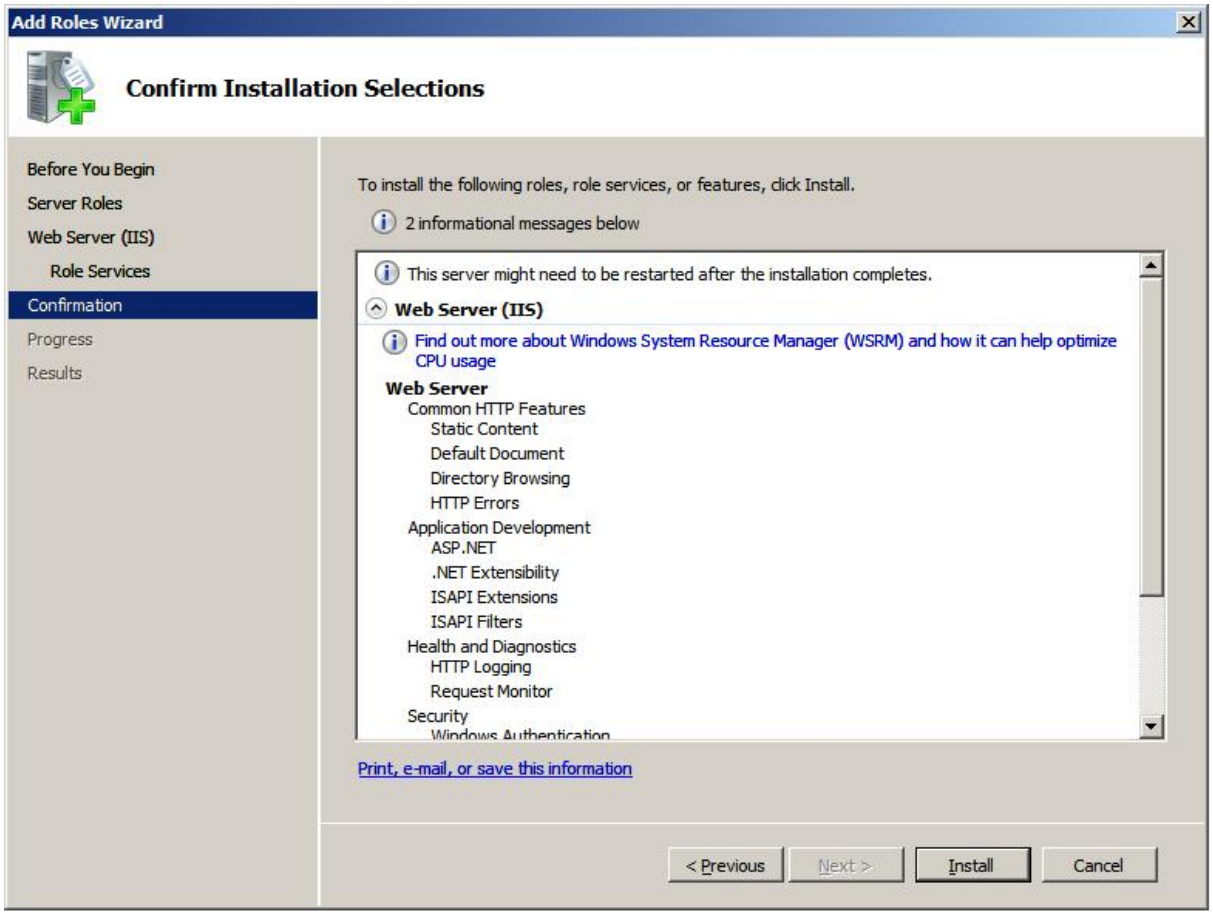
5. Click **Install** to begin installation of **IIS**. Finally click on **Close** to exit.



6. Now in Server manager click **Features** node -> **Add Feature** and select **.Net Framework 3.5.1 Features** / **.Net Framework 3.5.1** and click **Install**.

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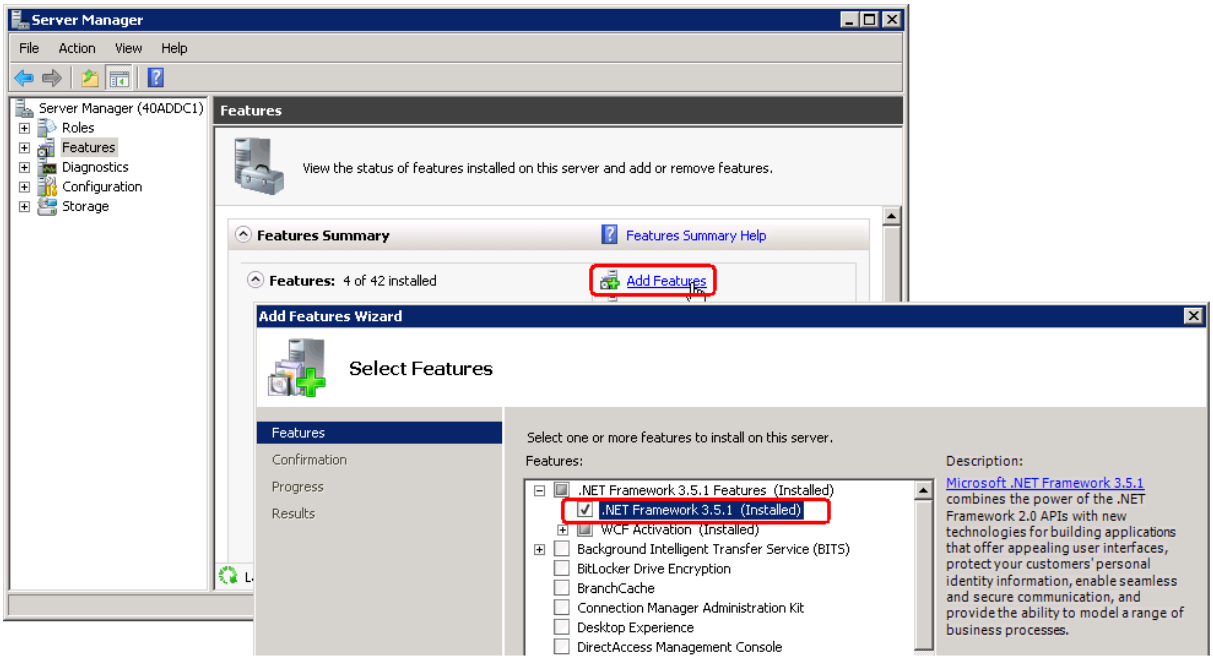
Server Manager
File Action View Help
Server Manager (40ADDC1)
Roles
Features
Diagnostics
Configuration
Storage
Features
View the status of features installed on this server and add or remove features.
Features Summary
Features Summary Help
Features: 4 of 42 installed
Add Features
Add Features Wizard
Select Features
Features
Confirmation
Progress
Results
Select one or more features to install on this server.
Features:
.NET Framework 3.5.1 Features (Installed)
.NET Framework 3.5.1 (Installed)
WCF Activation (Installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BranchCache
Connection Manager Administration Kit
Desktop Experience
DirectAccess Management Console
Description:
Microsoft .NET Framework 3.5.1 combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.

Upon installation of **Internet Information Services (IIS)** you need to enable **Web Service Extensions ASP.NET v2.0** and **4.0**. Follow these steps:

1. Click **Start /Settings /Control Panel /Administrative Tools /Internet Information Services (IIS) Manager**. Select server node and open the **ISAPI and CGI Restrictions** feature.

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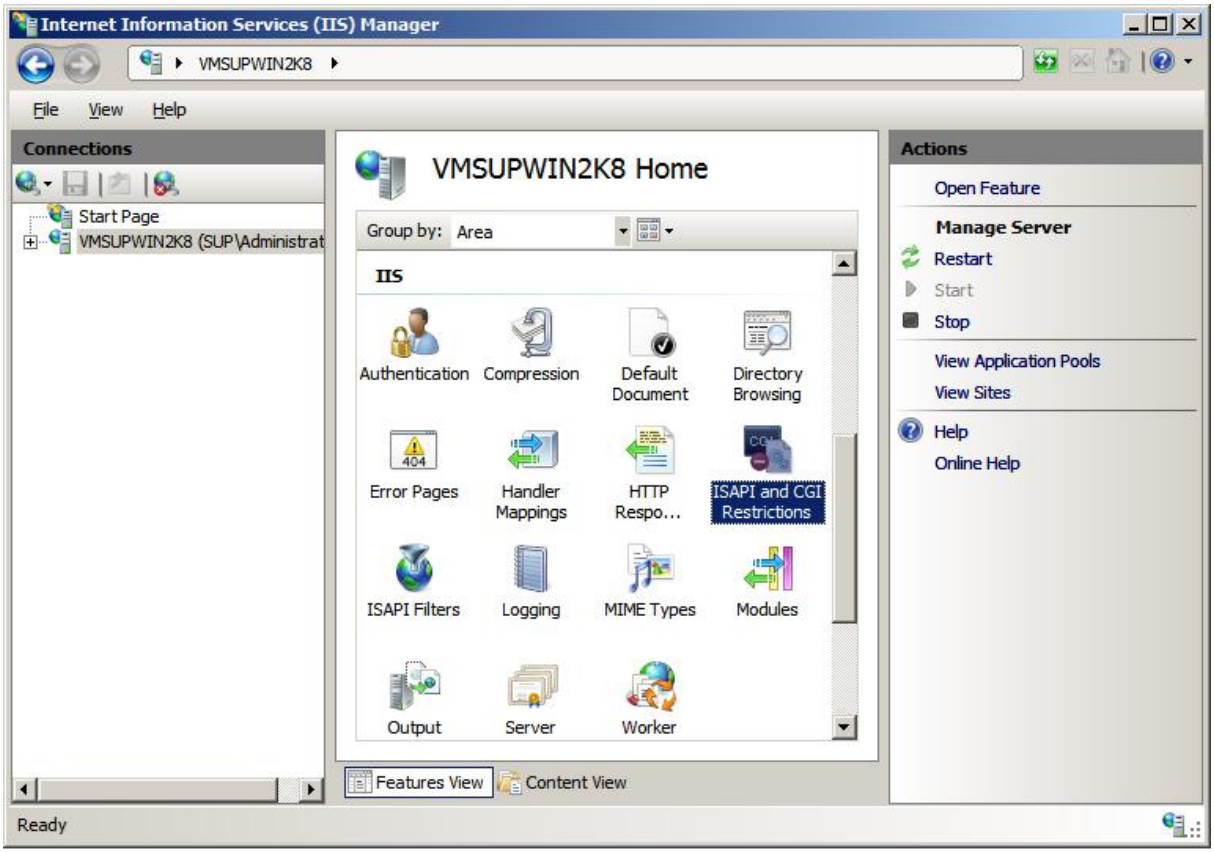
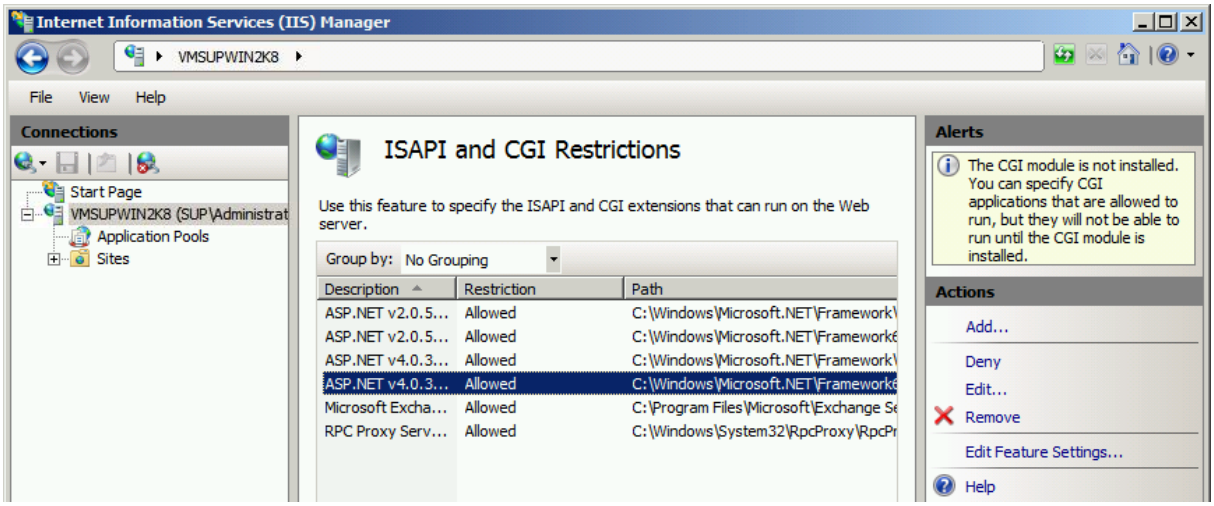


2. Check if **ASP.NET v2.0** and **4.0** ISAPI extensions are installed and allowed.



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Installation of the .NET Framework

Since Archive Manager is built on .NET technology, both .NET Framework 3.5 and 4.5 is required.

You can download .NET Framework 3.5 from the following link:

http://www.microsoft.com/en-us/download/details.aspx?id=21

You can download .NET Framework 4.5 from the following link:

http://www.microsoft.com/en-us/download/details.aspx?id=30653

In case of **Windows Server 2008** R2 SP1 it is necessary to download and install only .NET Framework 4.5. The other - .NET Framework 3.5 – has already been added as a feature (see the section above "Installation of IIS on Windows Server 2003").

In case of **Windows Server 2012** both of them are added via Server Manager (see the section above "Installation of IIS on Windows Server 2012").

NOTE: In case of Windows Server 2008 R2 SP1 run the following command:

C:\Windows\Microsoft.NET\Framework64\v4.0.30319 aspnet_regiis.exe -i

Assigning administrator rights to the super-user over the Archive Manager Server

We have already created a super-user domain account (see "Creating a super-user account"). Now you need to assign to it local administrator rights on your Archive Manager server computer. In case that the Archive Manager Server will NOT be running on the Domain Controller, follow the steps described in **a).** In case that Archive Manager Server will be running on the Domain Controller, follow the steps described in **b).**

a) Assigning local administrator rights to the super-user (not on the Domain Controller)

Assume that Archive Manager will not be running on the Domain Controller. Then you need to assign

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local administrator rights to the super-user on the Archive Manager Server computer.

To assign local administrator rights to the super-user (srv_exchange) on the Archive Manager server computer:

1. On the intended Archive Manager Server computer right-click **My Computer** and, in the context menu, select **Manage** (or in Windows Server 2012 open **Computer Management** by running *compmgmt.msc*).
2. Double-click the **Local Users and Groups** folder to expand it.
3. Double-click the **Groups** folder.
4. In the right pane right-click **Administrators** and, in the context menu, select **Properties**. The **Administrators Properties** window opens.
5. Click the **Add** button.
6. Enter **srv_exchange** in the text box and click **OK**.
7. Confirm by clicking **Apply** and **OK**.

NOTE: This super-user account must not be a domain administrator.

b) Assigning local administrator rights to the super-user (on the Domain Controller)

Assume that the Archive Manager will be running on the Domain Controller. Then to assign it the local administrator rights:

1. On the Archive Manager Server open the **Active Directory Users and Computers** (click **Start \Administrative tools \Active Directory Users and Computers**).
2. Locate the super-user account (**srv_exchange**) in your Active Directory. You can simply right-click the domain node and search for it using the **Find** icon in the toolbar.
3. Right-click **svr_exchange** and in its context menu select **Properties**.
4. In the **svr_exchange Properties** window click the **Member of** tab.
5. Click the **Add** button to open the **Select groups** window.
6. In the **Select groups** window make sure to insert your domain name in the **From this Location** box.
7. In the **Enter the object name to select** text box write **Administrators** and click the **Check Names** button.

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8. Click **OK**. Click **Apply** and then **OK**.

Assigning rights to the super-user over the Configuration Container

We have to grant the super-user Read permission over the organization's Configuration container recursively. There are more ways to grant this permission, one way is to use ADSI Editor (which is part of the Windows Support Tools). We will demonstrate how to grant the necessary permissions using ADSI Editor.

NOTE: These permissions are required to read the list of Exchange servers and Information Stores of the organization.

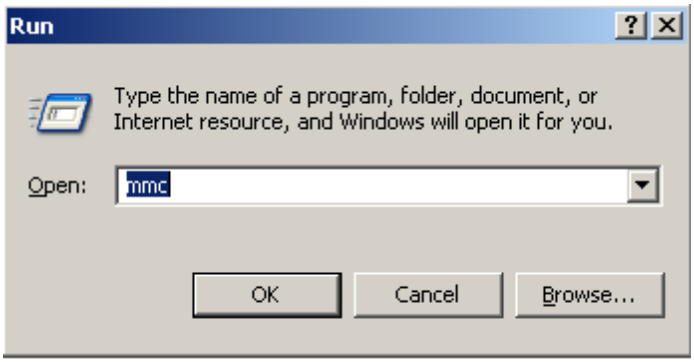
If you run MMC on a domain controller you will find the ADSI Edit tool. On other machines (like MS Exchange or others) this tool may not be present in the MMC snap in console. In that case the ADSIEDIT.MSC tool can be freely downloaded from the following link where you can find a good knowledgebase about this tool as well:

http://www.computerperformance.co.uk/w2k3/utilities/adsi_edit.htm#Download_ADSI_Edit

After downloading and saving it e.g. on your Exchange Server, it is necessary to register the **adsiedit.dll** via the **regsv32** (`%systemroot%\System32\regsv32 adsiedit.dll`), otherwise it will not be possible to run this tool, even if it is copied under windows\system32.

To configure super-user rights over Configuration Container:

1. Open the "MMC" by clicking **Start** / **Run**.



2. Console dialog opens. To add ADSI (Active Directory Services Interface) Edit, click **File** / **AddRemove Snap-in**.

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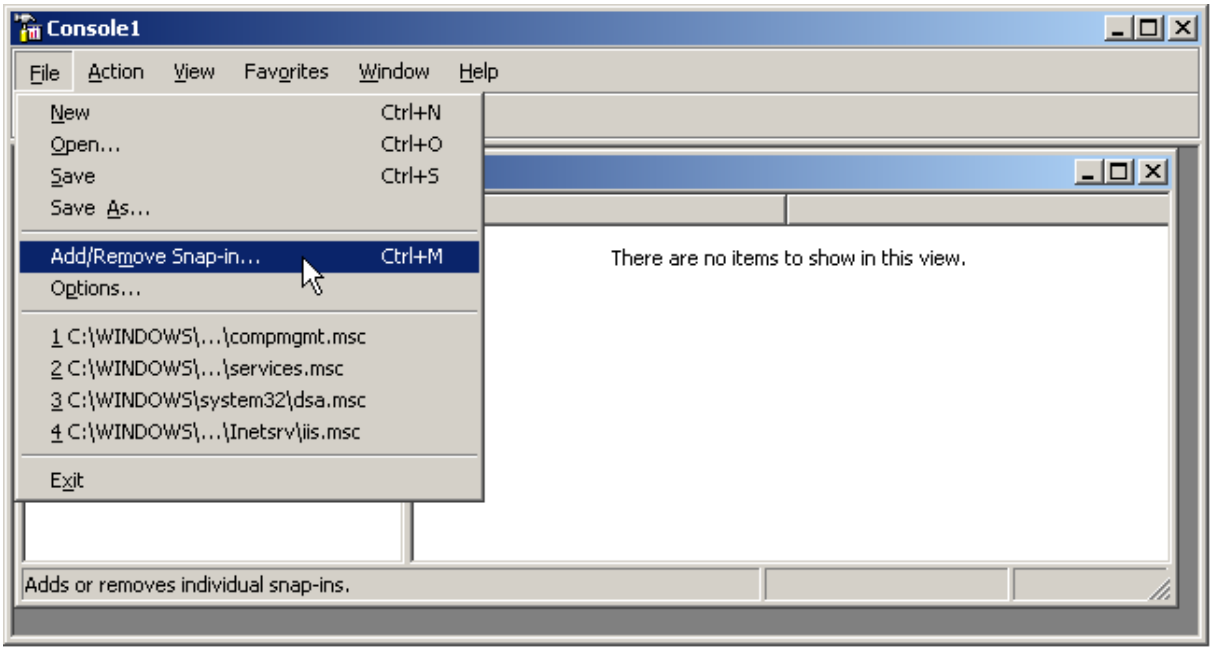
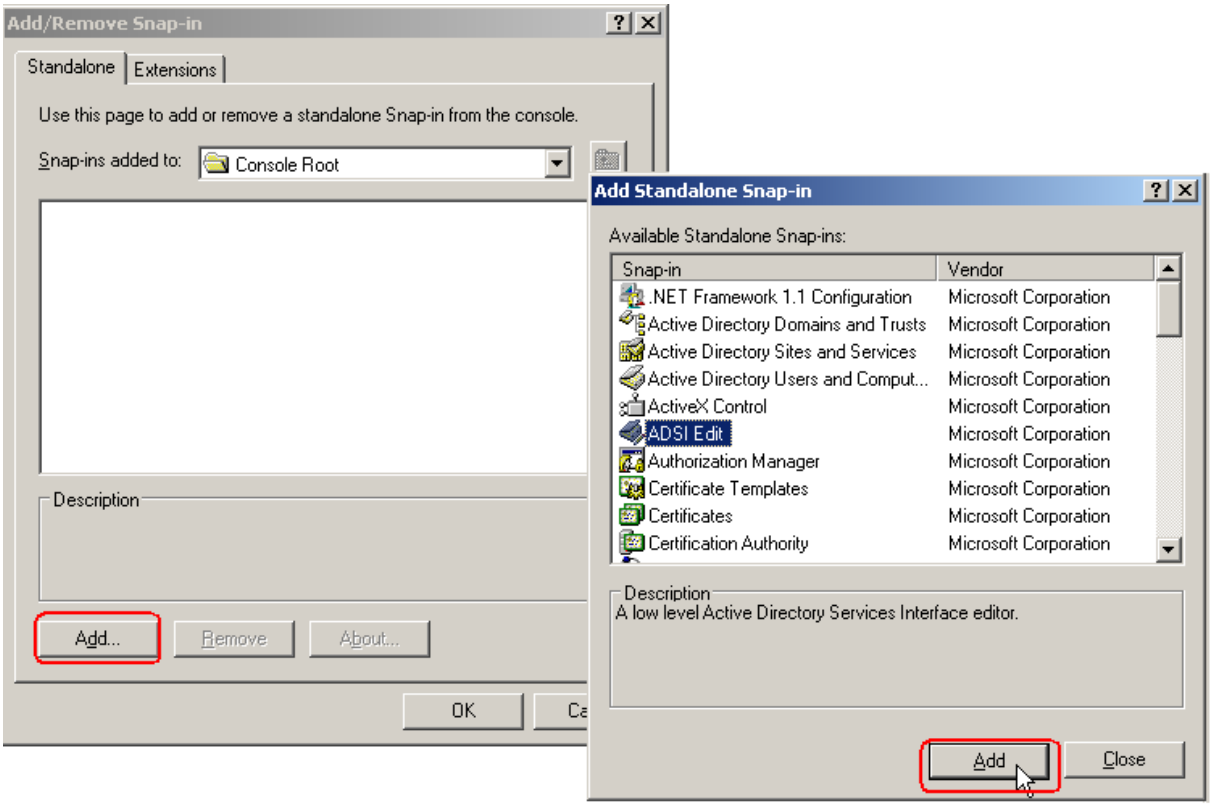


3. In the pop-up window click **Add**. Select **ADSI Edit** in the pop-up Snap-in list and click **Add** again. Then click **OK**.


Add/Remove Snap-in
Standalone Extensions
Use this page to add or remove a standalone Snap-in from the console.
Snap-ins added to: Console Root
Description
Add... Remove About...
OK
Add Standalone Snap-in
Available Standalone Snap-ins:
Snap-in Vendor
.NET Framework 1.1 Configuration Microsoft Corporation
Active Directory Domains and Trusts Microsoft Corporation
Active Directory Sites and Services Microsoft Corporation
Active Directory Users and Comput... Microsoft Corporation
ActiveX Control Microsoft Corporation
ADSI Edit Microsoft Corporation
Authorization Manager Microsoft Corporation
Certificate Templates Microsoft Corporation
Certificates Microsoft Corporation
Certification Authority Microsoft Corporation
Description
A low level Active Directory Services Interface editor.
Add Close

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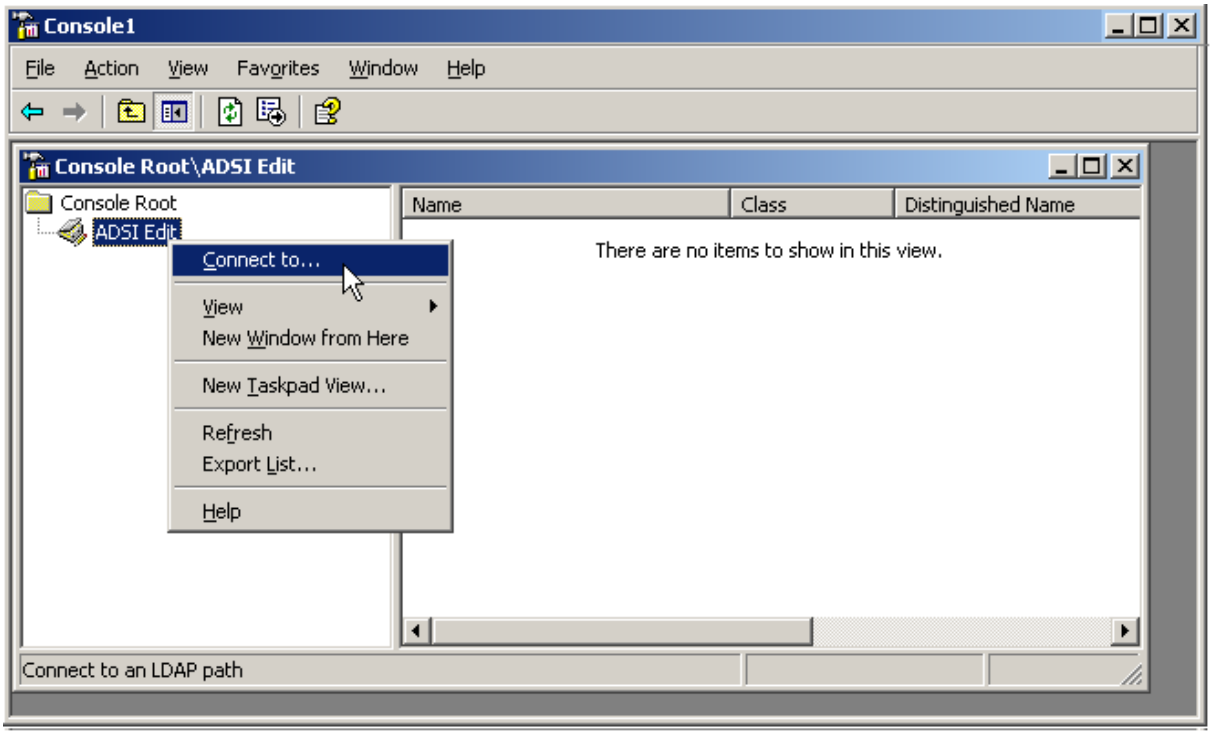
4. The ASDI Edit will be added to the Console root. Right-click it and select **Connect to** to define the connection settings.



5. New dialog pops-up. In the **Select a well known Naming Context** dropdown box select **Configuration** and click **OK**.

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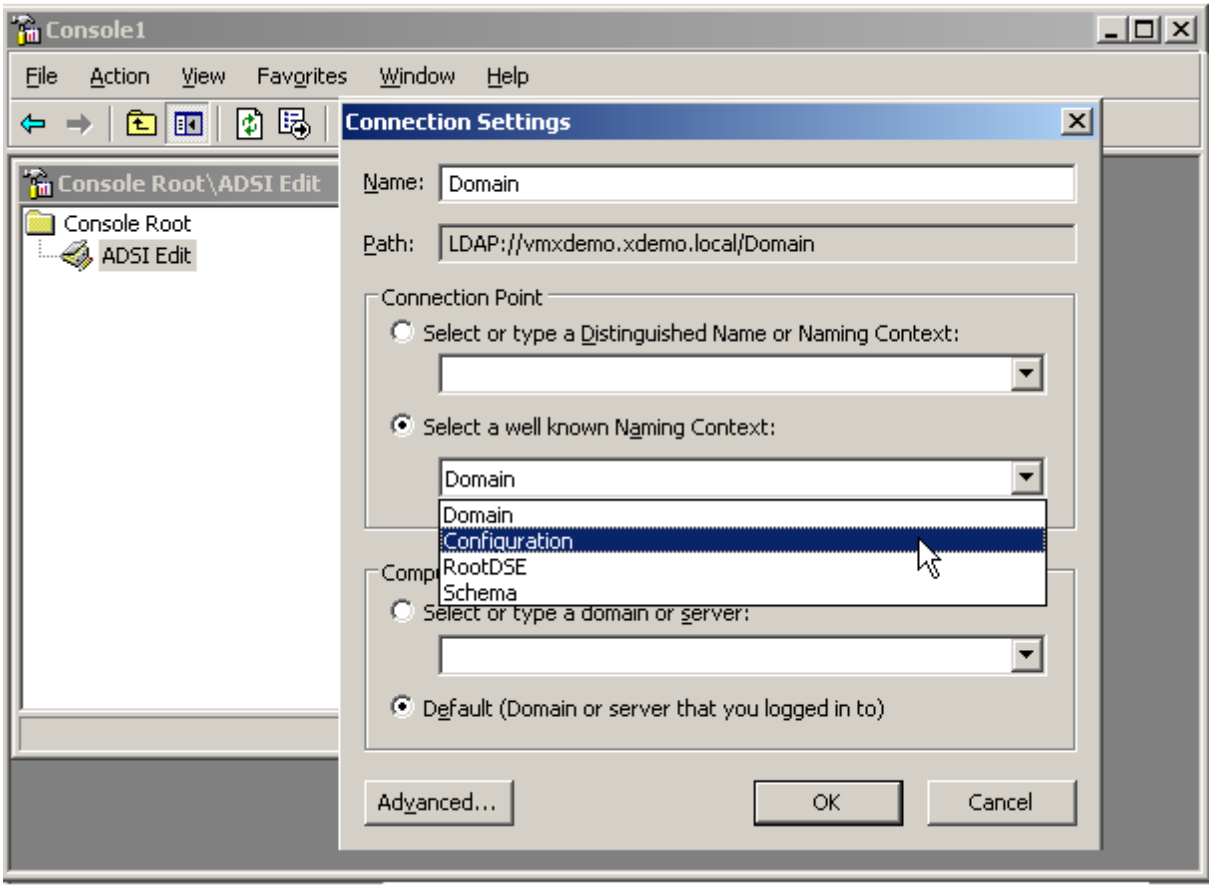

6. Now you will set the super-user permissions over Configuration container. Back in the **Console** window, unfold the **ADSI Edit** down to the **CN=Configuration** container. Right-click the **CN=Configuration** node and select **Properties**.

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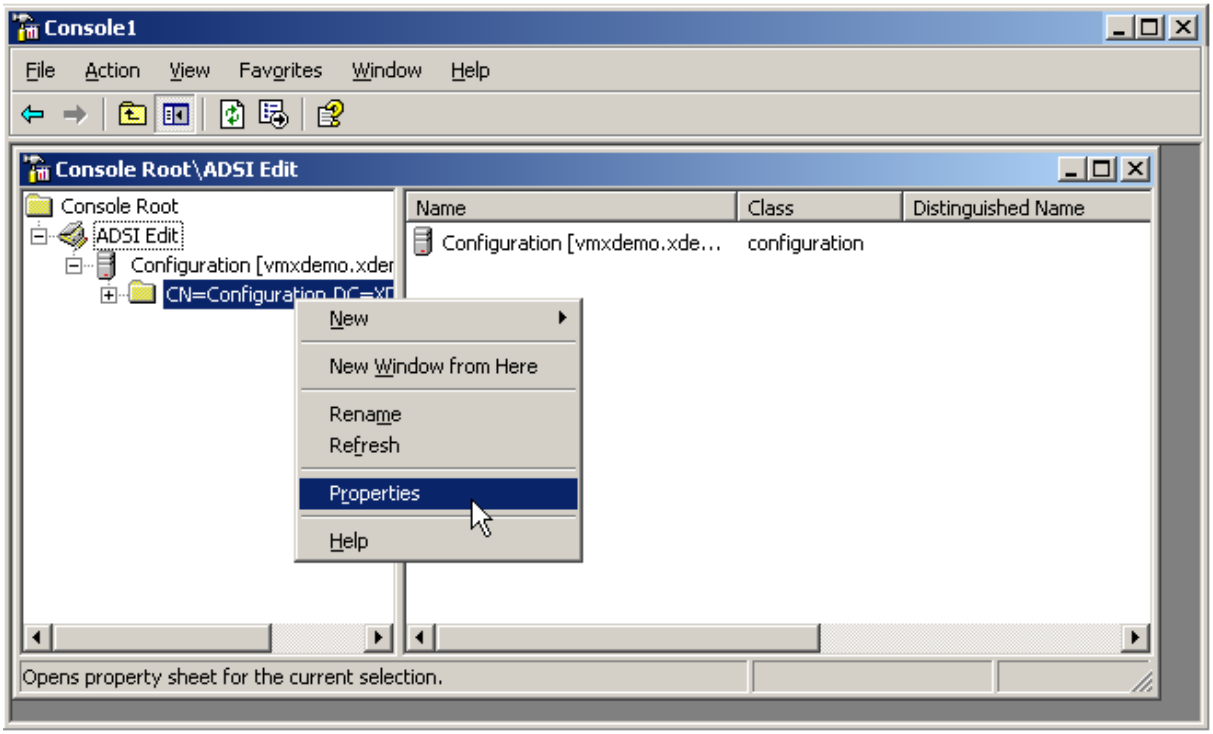

7. On the **Security** tab of the **Properties** window, click **Add** to add the super-user.

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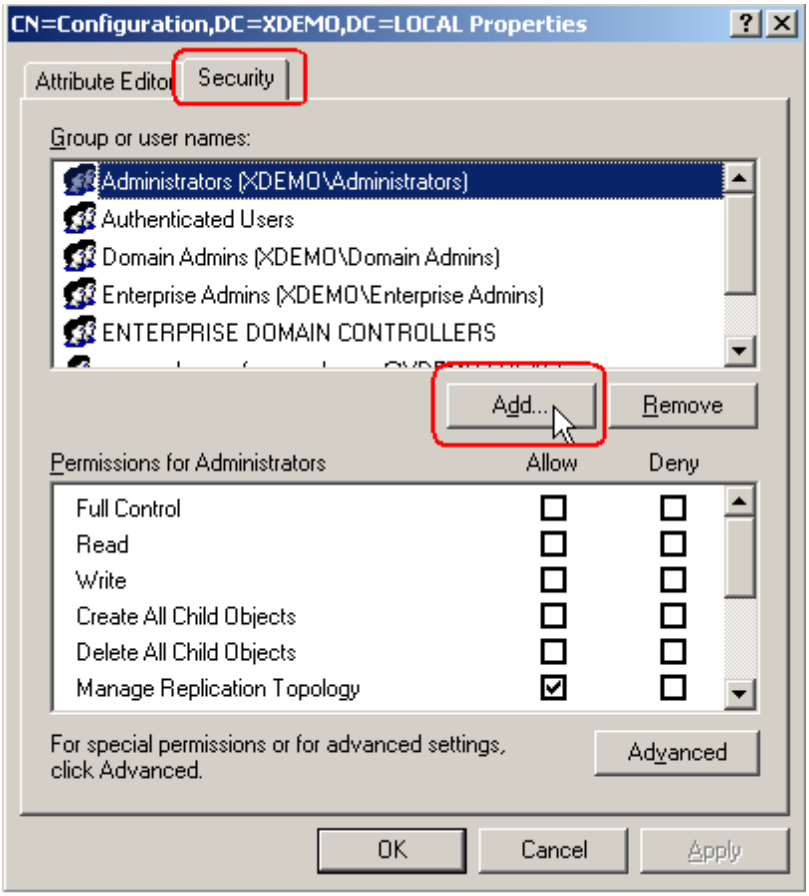

8. When the super-user is added, locate it in the list view and click **Advanced**.

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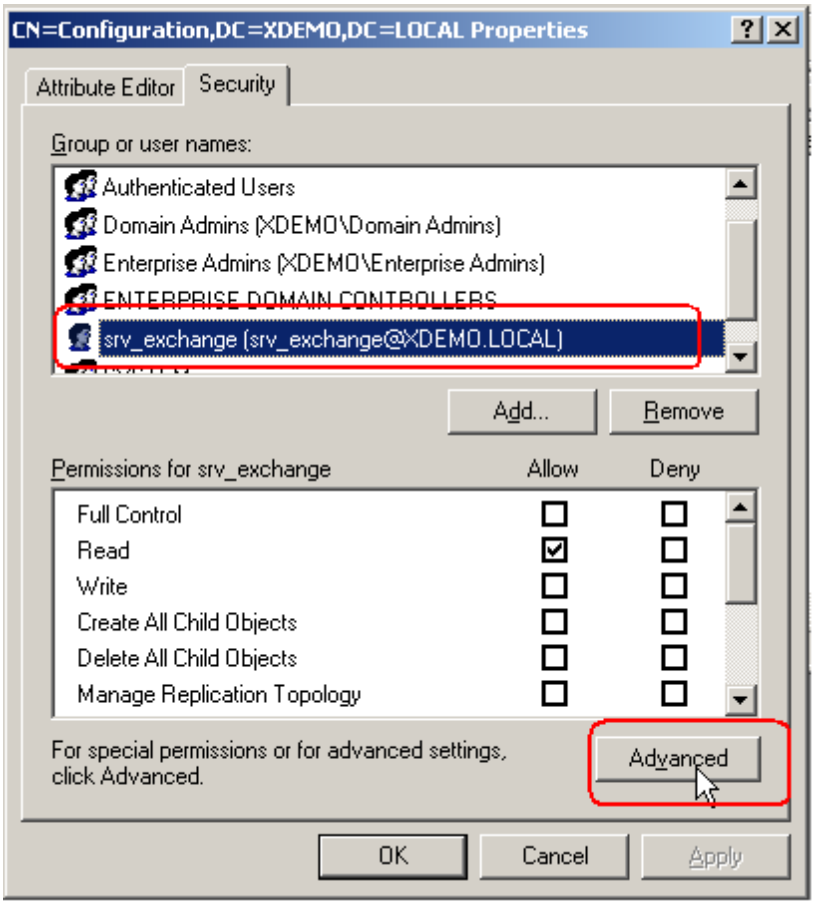

9. Locate the super-user. You can see that the permissions do not apply to child objects. To apply the permissions to child objects as well, click **Edit**.

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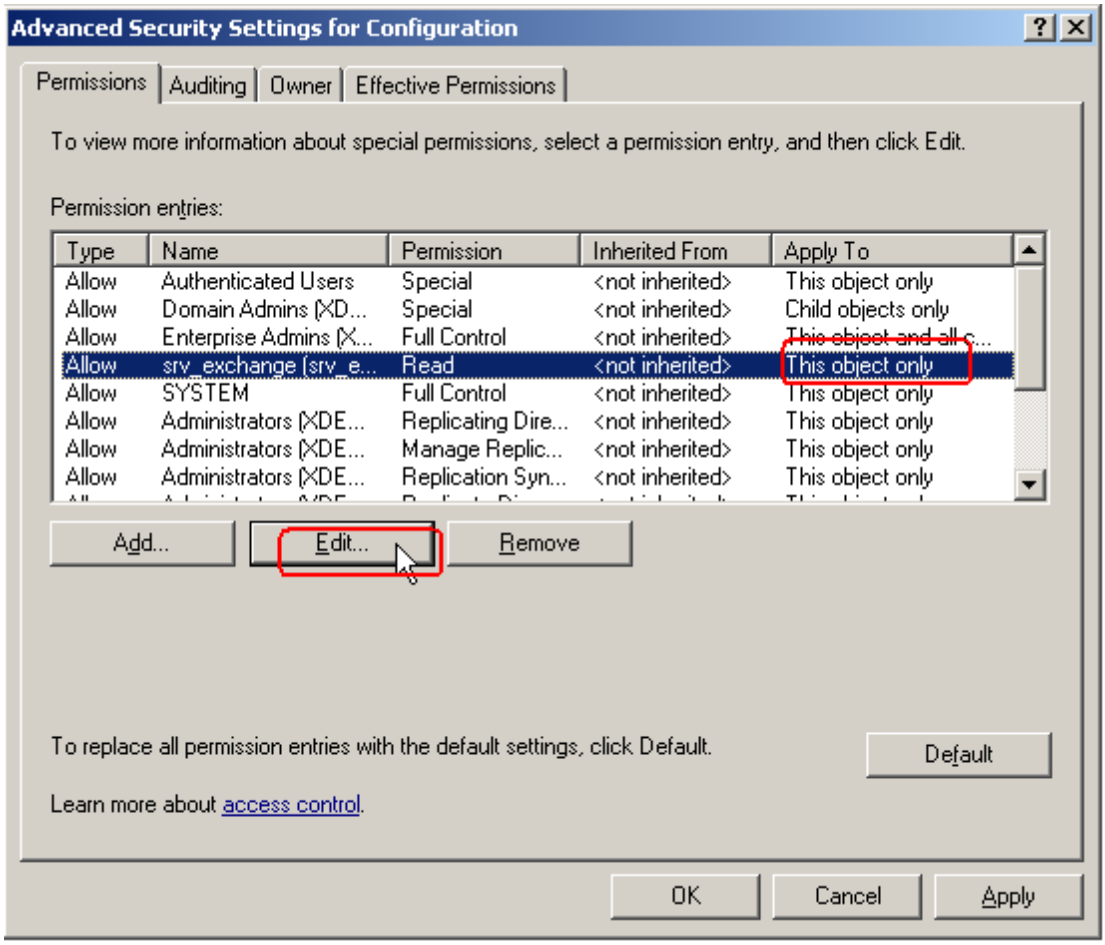

10. In the **Apply onto** drop-down box select “This object and all descendant objects”.

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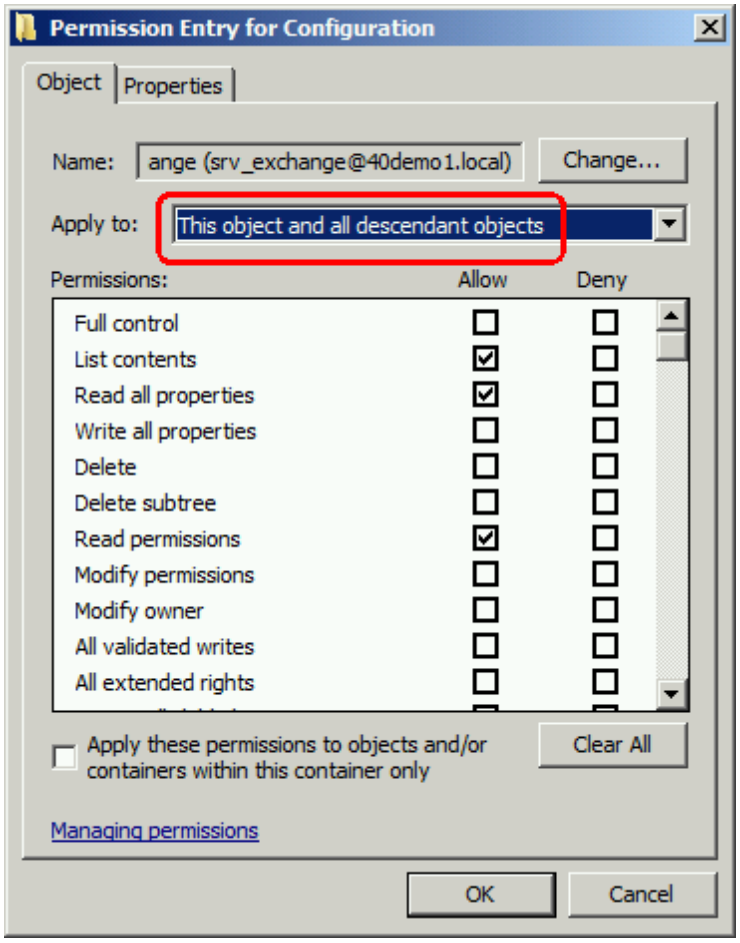

11. Click **OK**, then **Apply**.

Granting the super-user permissions in MS Exchange Server

Archive Manager Exchange Edition requires that the super-user be granted some administrative permissions and access to the mailboxes which will be archived. In Exchange 2010, the super-user must be assigned the "View-Only Organization Management" role. This ensures that the mailboxes and public folders can be accessed using the required administrative privileges. Further, the access to the mailboxes is granted by setting the "Receive As" permission to the super-user. This can be achieved on mailbox level or on database level (Exchange Information Store). In this document we demonstrate the right assignment on the database level.

Exchange Server 2010 uses client throttling policies to track the bandwidth that each user consumes and enforce bandwidth limits as necessary. Archive Manager needs more resources than the allowed limit, therefore the throttling policy must be changed for the super-user.

Summary of tasks:

I. Assign super-user (srv_exchange) the "View-Only Organization Management" role

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II. Assign super-user (srv_exchange) the "Public Folder Management" role
III. Grant super-user (srv_exchange) permissions to all mailboxes
IV. Change client throttling for super-user (srv_exchange)

Summary of cmdlets which carry out the above mentioned tasks:

```
Add-RoleGroupMember -Identity "View-Only Organization Management" -Member
"srv_exchange"
```

```
Add-RoleGroupMember -Identity "Public Folder Management" -Member
"srv_exchange"
```

```
Get-MailboxDatabase | Add-ADPermission -User "srv_exchange" -AccessRights
ExtendedRight -ExtendedRights Receive-As, ms-Exch-Store-Admin -
InheritanceType 'All'
```

```
New-ThrottlingPolicy MAM4Exchange
```

```
Set-ThrottlingPolicy MAM4Exchange -RCAMaxConcurrency $null -
RCAPercentTimeInAD $null -RCAPercentTimeInCAS $null -
RCAPercentTimeInMailboxRPC $null
```

```
Set-Mailbox "srv_exchange" -ThrottlingPolicy MAM4Exchange
```

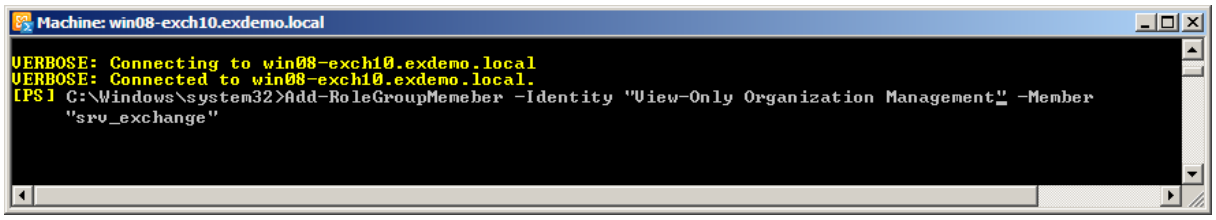
Find the detailed description of the process in the following lines.

Add super-user (srv_exchange) the "View-Only Organization Management" role:

1. Run the **Exchange Management Shell** from **Start** / **Programs** / **Microsoft Exchange Server 2010** / **Exchange Management Shell**.

   Run the following cmdlet in PowerShell to assign super-user (srv_exchange) to the View-Only Organization Management role:

```
Add-RoleGroupMember -Identity "View-Only Organization Management" -Member
"srv_exchange"
```



2. Run the cmdlet to assign super-user (srv_exchange) to the Public Folder Management role:

```
Add-RoleGroupMember -Identity "Public Folder Management" -Member
"srv_exchange"
```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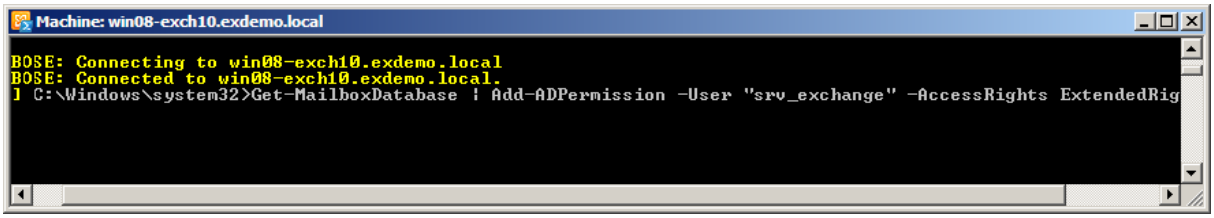
3. Then run the cmdlet to grant srv_exchange permissions to all mailboxes:

```
Get-MailboxDatabase | Add-ADPermission -User "srv_exchange" -AccessRights
ExtendedRight -ExtendedRights Receive-As, ms-Exch-Store-Admin -
InheritanceType 'All'
```


Machine: win08-exch10.exdemo.local
BOSE: Connecting to win08-exch10.exdemo.local
BOSE: Connected to win08-exch10.exdemo.local.
] C:\Windows\system32>Get-MailboxDatabase | Add-ADPermission -User "srv_exchange" -AccessRights ExtendedRig

NOTE: It may take some time until the super-user rights are assigned.

4. Lastly, run the 3 following cmdlets to set the throttling policy for srv_exchange:

```
New-ThrottlingPolicy MAM4Exchange
```

```
Set-ThrottlingPolicy MAM4Exchange -RCAMaxConcurrency $null -
RCAPercentTimeInAD $null -RCAPercentTimeInCAS $null -
RCAPercentTimeInMailboxRPC $null
```

```
Set-Mailbox "srv_exchange" -ThrottlingPolicy MAM4Exchange
```

Granting super-user impersonation permissions in MS Exchange Server

Super-user must be granted impersonation permissions in Exchange Server just in case that you plan to access archived emails via OWA. Otherwise these permissions are not necessary.

NOTE: **Archive Manager OWA support requires Exchange 2010 Server running the Windows Server 2008 (64-bit version).** To install and configure the OWA extension of Archive Manager, the *Archive Manager Exchange Edition_64bit_Extensions* setup has to be downloaded and installed on Exchange Server (see the "Installation of optional features" manual).

Use the PowerShell to grand the super-user *Impersonation* permissions over all Exchange 2010 Servers in your environment:

1. Run the **Exchange Management Shell** from **Start** / **Programs** / **Microsoft Exchange Server 2010** / **Exchange Management Shell**.

2. To grant the super-user *Impersonation* permissions, run the following command:

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```
New-ManagementRoleAssignment -Name "Impersonation-MAM4Exchange" -Role
"ApplicationImpersonation" -User "srv_exchange"
```

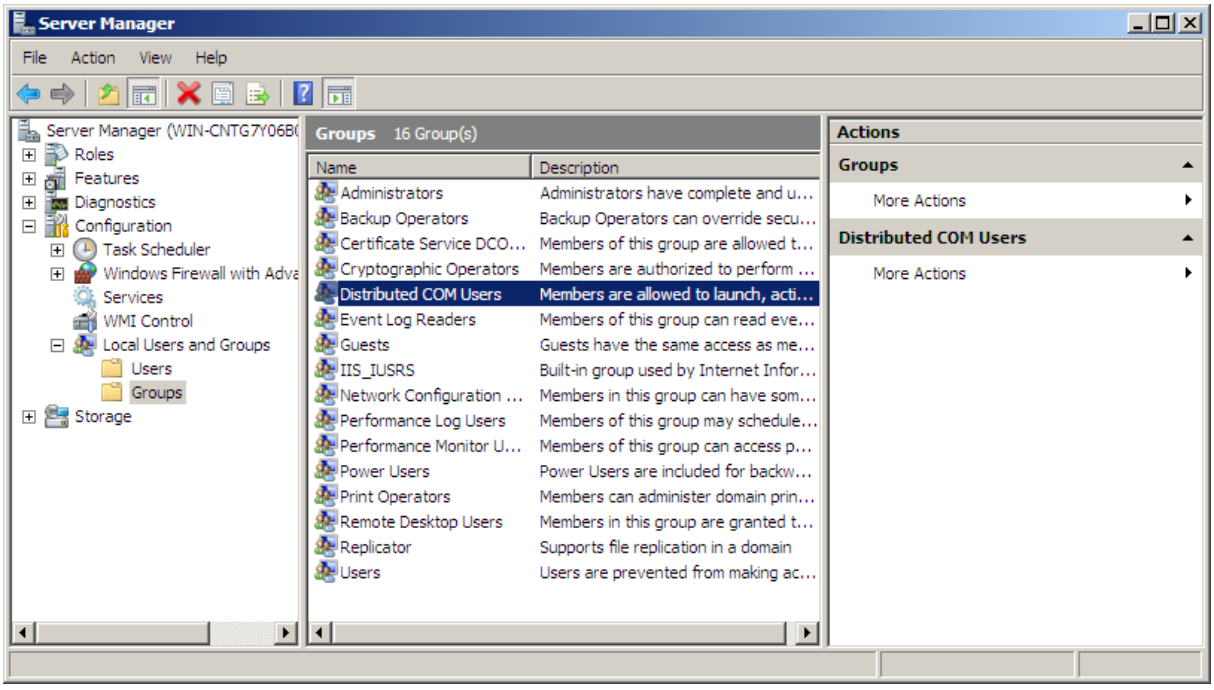
Assigning DCOM rights on Windows Server 2008 / 2012

When installing Archive Manager on a MS Windows Server 2008 (R2 SP1) or Windows Server 2012, additional DCOM settings need to be taken into consideration.

To set DCOM rights on a MS Windows Server 2008 (R2 SP1), follow these steps:

1. Right-click **My Computer** and in the context menu select **Manage**.
2. In the **Computer Management** window expand the **Local Users and Groups** node and then select the **Groups** node.

NOTE: If you are installing Archive Manager on a Domain Controller machine, please note that by managing your computer you will not find the **Local Users and Groups** node in the **Computer Management** window. Therefore to locate the **Distributed COM Users** group, use the **Active Directory Users and Computers** tool. To do so, click **Start /Programs /Administrative Tools /Active Directory Users and Computers** and simply search for the **Distributed COM Users** group (click on the **Action** menu and then click **Find** and search in Entire directory).



3. Double-click the **Distributed COM Users** group in the right pane to open its **Properties** window and then add the super-user (**srv_exchange** account) to this group:

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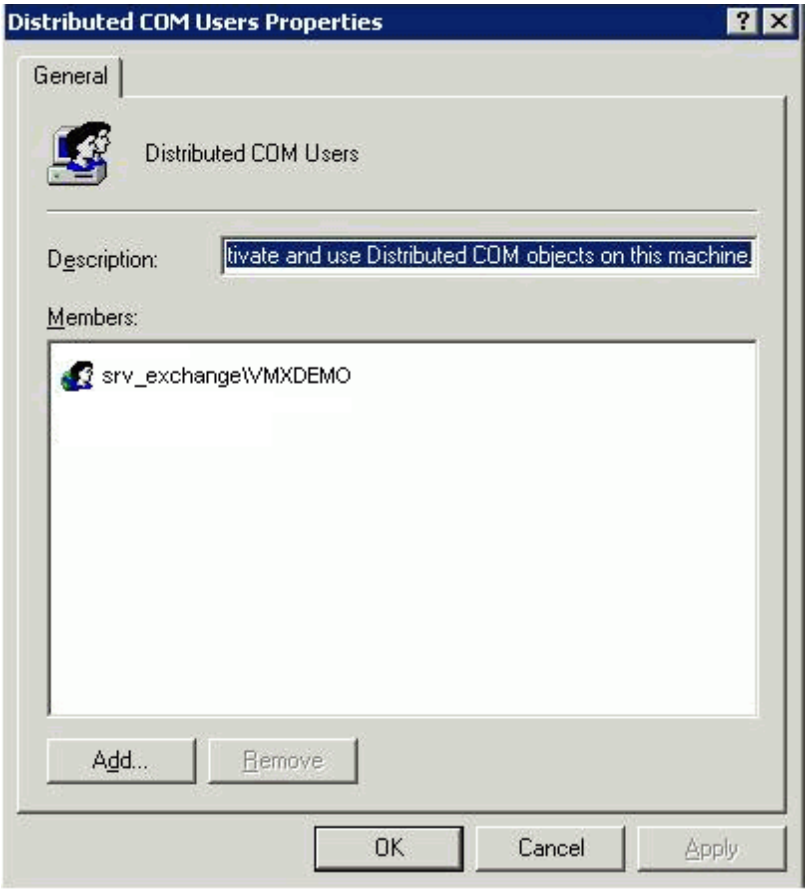

4. After adding the required account to the **Distributed COM Users** group you need to give this group both ***access*** and ***launch permissions*** on **Component Services**.

   To do so, run **Component Services** (click **Start /Settings /Control Panel /Administrative Tools /Component Services**).

   In the **Component Services** window expand the **Component Services** tree down to **Component Services \Computers \My Computer** and then right-click **My Computer** to open its **Properties** window.

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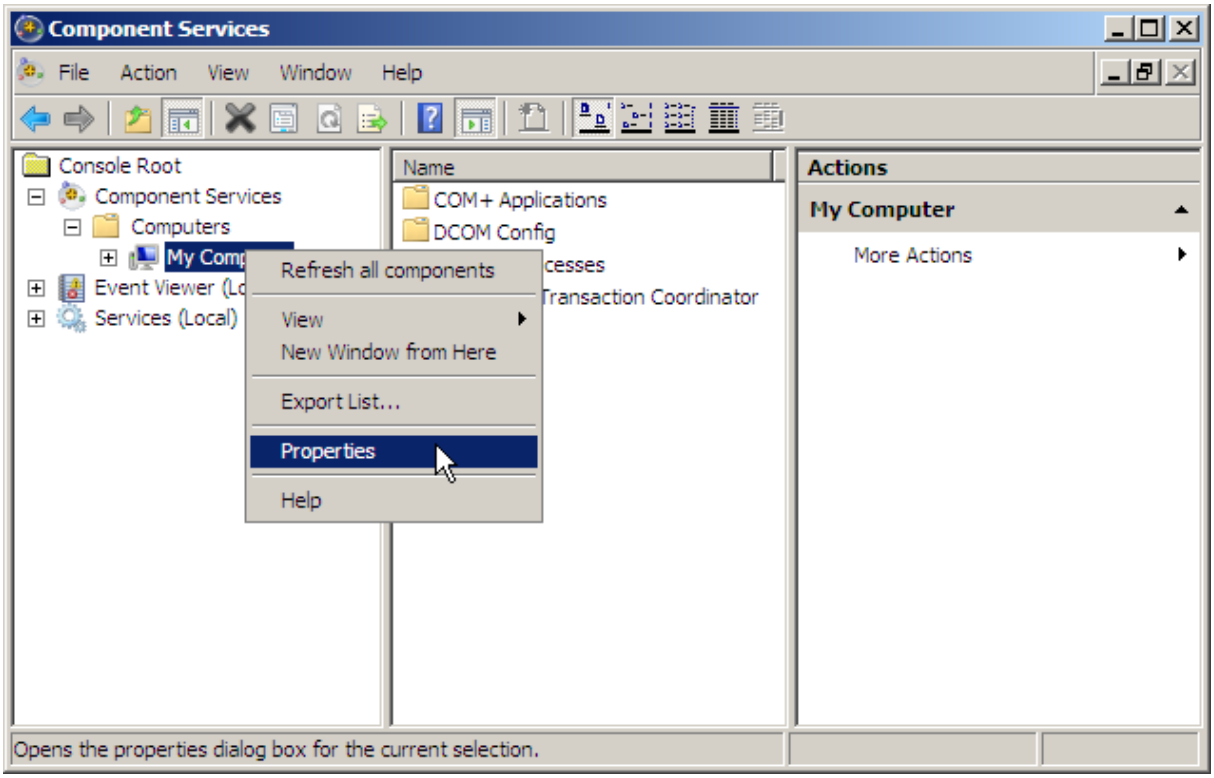

5. In the **Properties** window switch over to the **COM Security** tab.

   In order to assign the **Distributed COM Users** group and **NETWORK SERVICE** the ***Access Permissions*** you need to click on the **Edit Default** button in the **Access Permissions** section.

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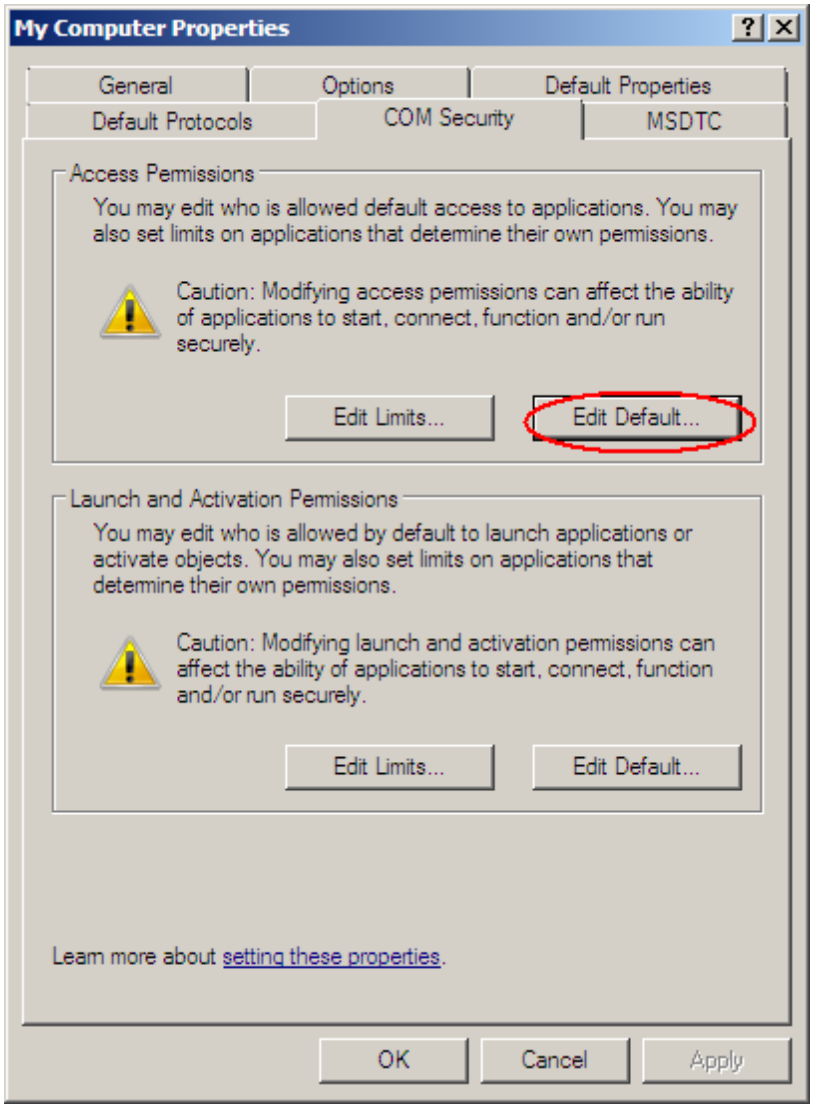
My Computer Properties
General
Options
Default Properties
Default Protocols
COM Security
MSDTC
Access Permissions
You may edit who is allowed default access to applications. You may also set limits on applications that determine their own permissions.
Caution: Modifying access permissions can affect the ability of applications to start, connect, function and/or run securely.
Edit Limits...
Edit Default...
Launch and Activation Permissions
You may edit who is allowed by default to launch applications or activate objects. You may also set limits on applications that determine their own permissions.
Caution: Modifying launch and activation permissions can affect the ability of applications to start, connect, function and/or run securely.
Edit Limits...
Edit Default...
Learn more about setting these properties.
OK
Cancel
Apply

6. In the **Access Permission** dialog add the **Distributed COM Users** group and the **NETWORK SERVICE** using the **Add** button. The **Distributed COM Users** group needs both local and remote Access permissions. The **NETWORK SERVICE** needs only local Access permissions. Then click **OK**.

   IMPORTANT NOTE: When trying to Find **Distributed COM Users** and the computer is not a domain controller, change the location to local computer.

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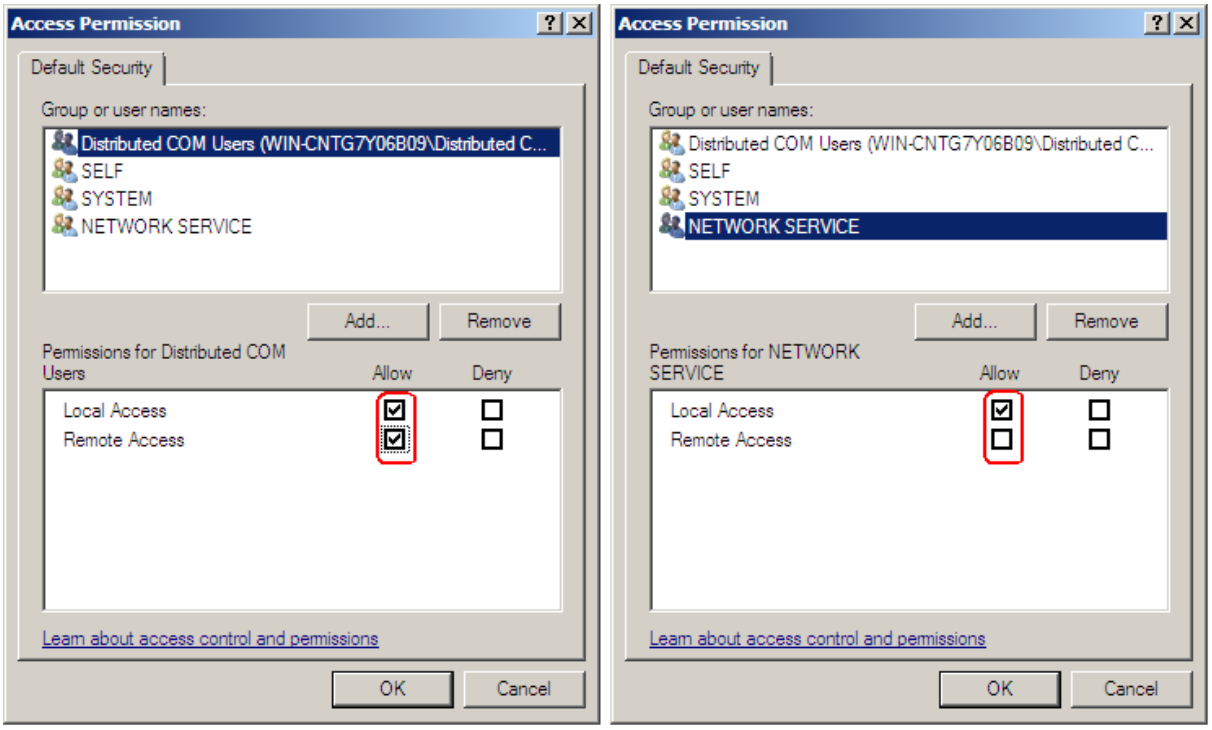

7. Back in the **Properties** window on the **COM Security** tab you need to grant ***launch permissions***. In order to grant the **Distributed COM Users** group and **NETWORK SERVICE** the ***Launch Permissions*** you need to click on the **Edit Default** button in the **Launch and Activation Permissions** section.

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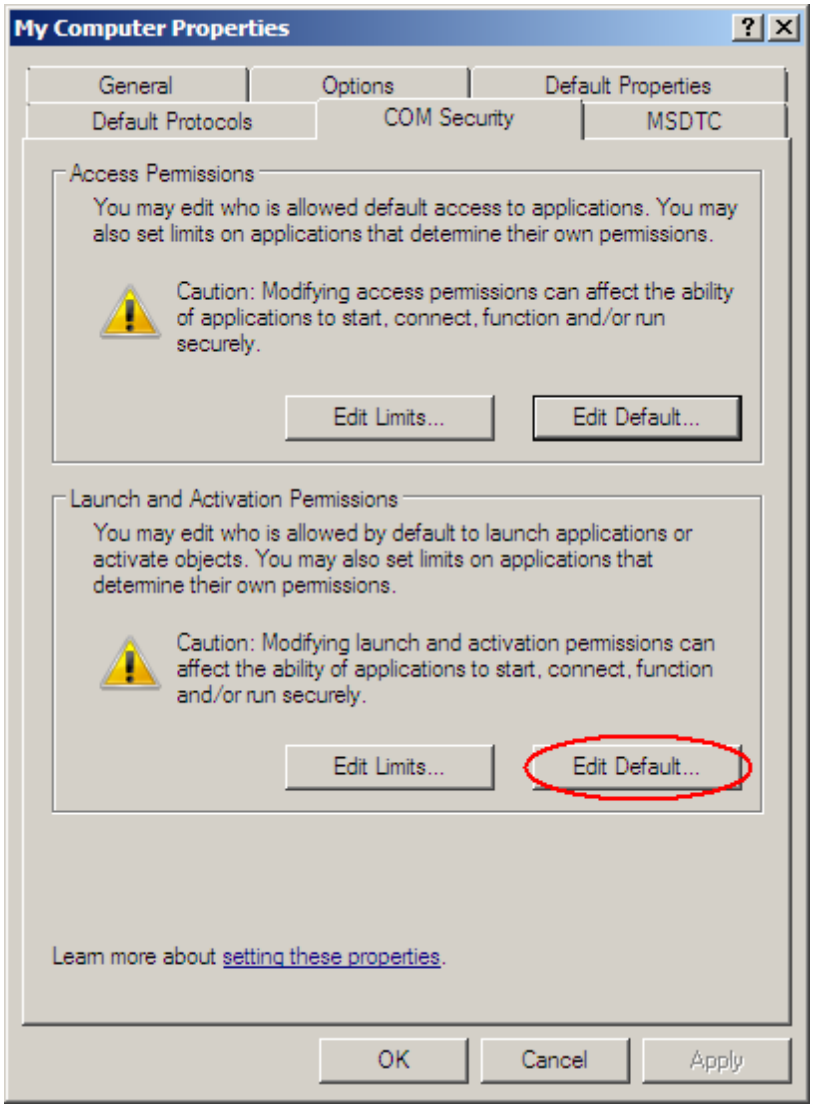
My Computer Properties
General
Options
Default Properties
Default Protocols
COM Security
MSDTC
Access Permissions
You may edit who is allowed default access to applications. You may also set limits on applications that determine their own permissions.
Caution: Modifying access permissions can affect the ability of applications to start, connect, function and/or run securely.
Edit Limits...
Edit Default...
Launch and Activation Permissions
You may edit who is allowed by default to launch applications or activate objects. You may also set limits on applications that determine their own permissions.
Caution: Modifying launch and activation permissions can affect the ability of applications to start, connect, function and/or run securely.
Edit Limits...
Edit Default...
Learn more about setting these properties.
OK
Cancel
Apply

8. In the **Launch and Activation Permissions** dialog add the **Distributed COM Users** group and the **NETWORK SERVICE** using the **Add** button. The **Distributed COM Users** group needs both local and remote Launch and Activation Permissions. The **NETWORK SERVICE** needs only the local Launch and Activation Permissions:

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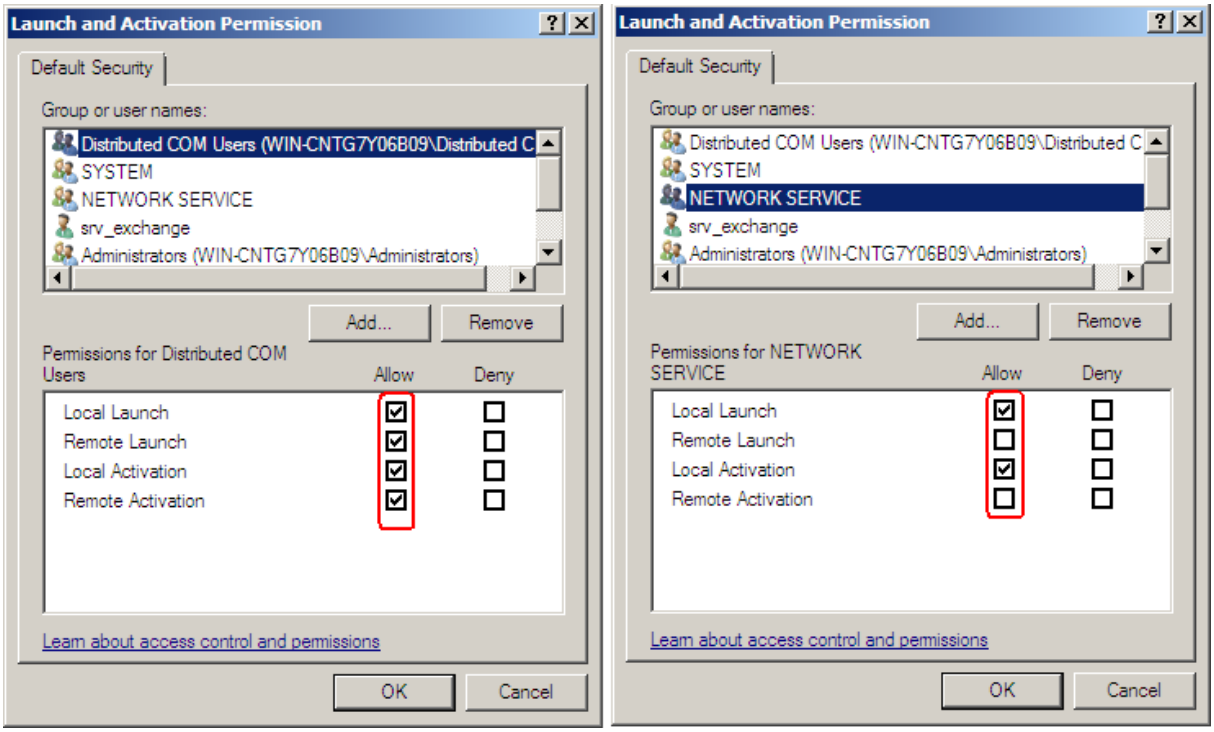

Creating and mounting a Public Folder database

Before creating an Organizational Forms library, which is a system folder stored in public folders, you must create and mount a Public Folder database.

NOTE: You can skip this step if you already have the Public Folder database created. Check it in Exchange Management Console / Organization Configuration / Mailbox / Database Management. In case the Public Folder database exists, proceed with the chapter "Creating an Organizational Forms Library".

To create and mount a Public Folder database:

1. Run the **Exchange Management Console** from **Start** / **Programs** / **Microsoft Exchange Server 2010** / **Exchange Management Console**.

2. In the console tree, navigate to **Organization Configuration** > **Mailbox**. In the action pane, click **New Public Folder Database**.

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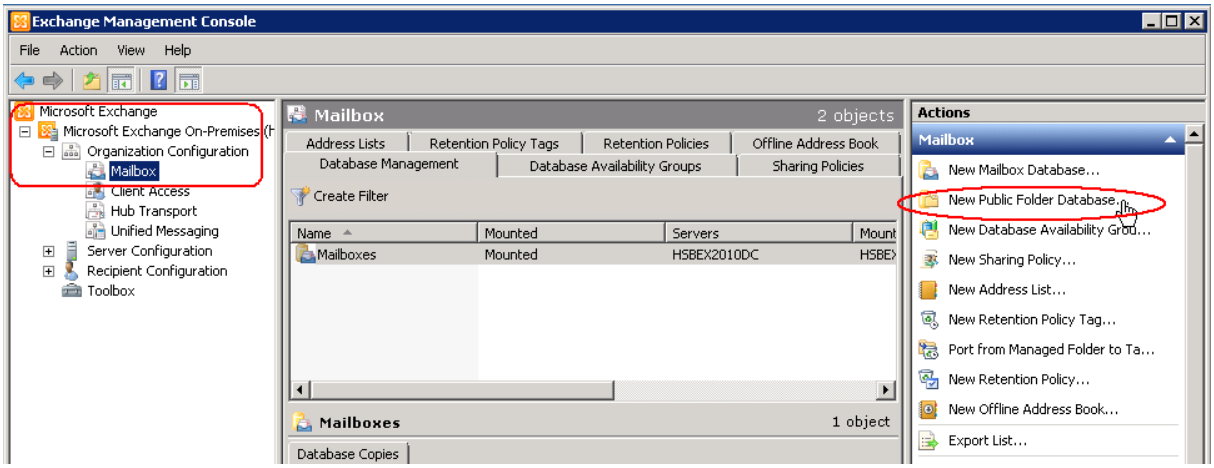
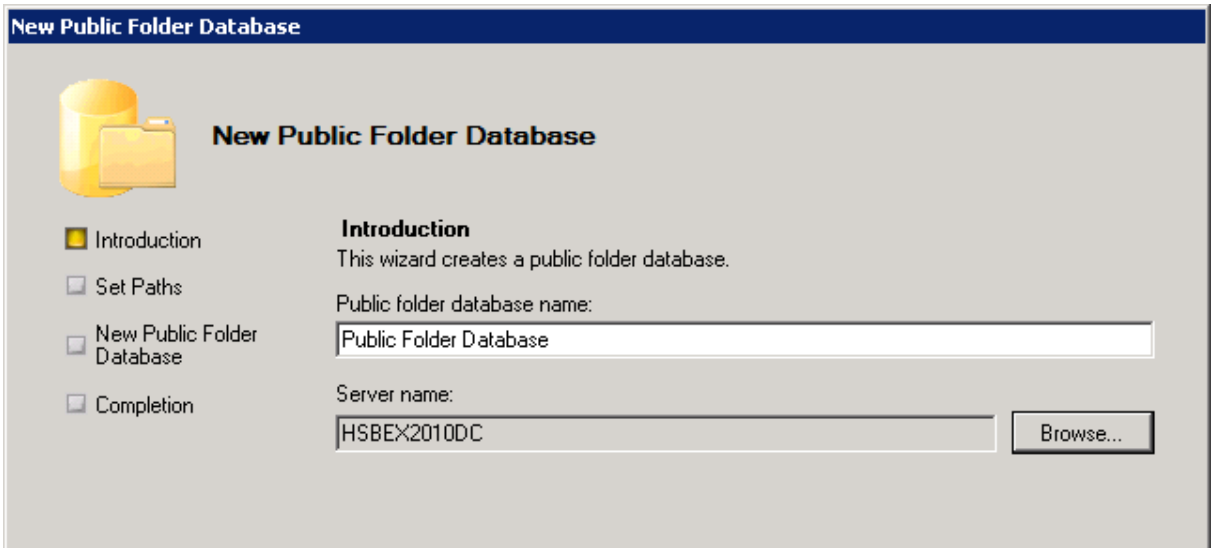


3. On the Introduction page, complete the following fields:

   - **Public folder database name** Use this box to type the name of the new public folder database.

   - **Server name** This box lets you specify where to create the public folder database. To specify a location click **Browse** to open the **Select Mailbox Server** dialog box. Use this dialog box to select the server where you want to create the public folder database, and then click **OK**.



4. On the **Set Paths** page, complete the following fields:

   - **Database file path** This box is automatically populated with the default path to the database file. To specify a different location or file name, type the location in the box.

   - **Log folder path** This box is automatically populated with the default path to the

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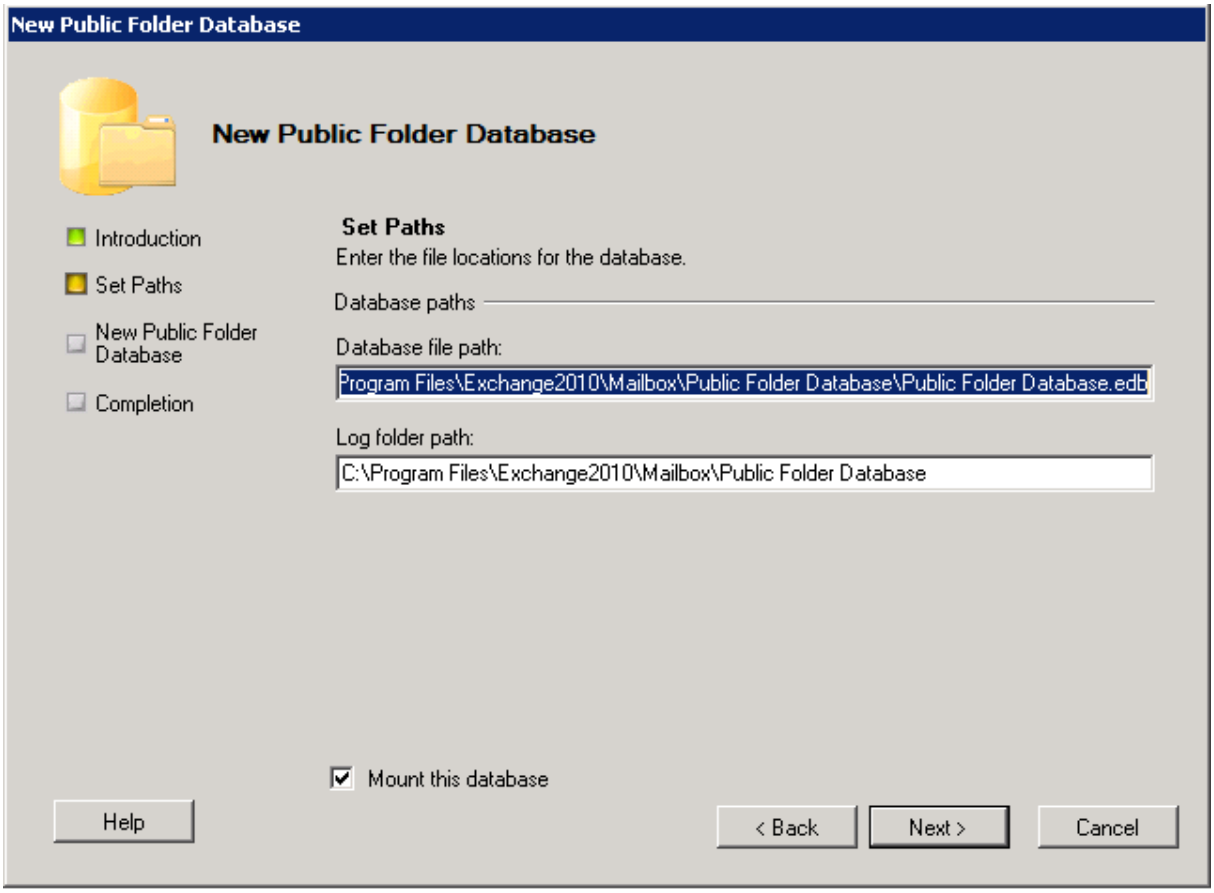
database log files. To specify a different location, type the location in the box.

- **Mount this database** Select this check box to mount the database immediately after it is created.



5. On the **New Public Folder Database** page, review your configuration settings. Click **New** to create the public folder database. Click **Back** to make changes.
6. On the **Completion** page, review the following, and then click **Finish** to close the wizard:
   - A status of **Completed** indicates that the wizard completed the task successfully.
   - A status of **Failed** indicates that the task wasn't completed. If the task fails, review the summary for an explanation, and then click **Back** to make any configuration changes.
7. Click **Finish** to close the wizard.

   NOTE: Provided that you have more Exchange 2010 servers, replicate the Public Folder Database to all of them.

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Creating an Organizational Forms Library

You need to have an Organizational forms library (which is actually a system folder stored in public folders) on your MS Exchange Server, i.e. you need to have a folder under the **EFORMS REGISTRY** where you will publish all Archive Manager forms. If such a folder doesn't exist yet, you have to create one.

NOTE: There can be several libraries created, one for each language.

Organizational forms library – if such exists – is located under the **EFORMS REGISTRY**. If the library exists under the **EFORMS REGISTRY**, you don't need to create another one. In that case proceed with the chapter "Assigning owner rights to the super-user over the Organizational Forms library".

To check whether an Organizational forms library exists:

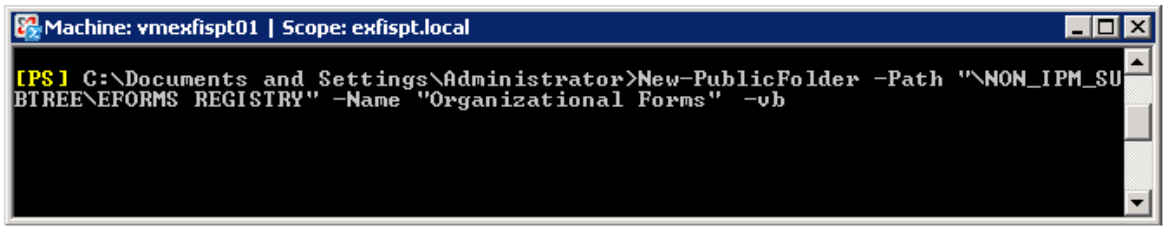
1. Open Outlook.
2. On the menu bar select **Tools** / **Forms** / **Choose Form**. **Choose Form** window opens.
   NOTE: In Outlook 2010/2013 click Home tab / New Items / More Items / Choose Form.
3. In the **Look in** down-drop box look for *Organizational Forms Library*, if it exists.

To create an Organizational forms library, follow these instructions:

1. Run the **Exchange Management Shell** from **Start** / **Programs** / **Microsoft Exchange Server 2010** / **Exchange Management Shell**.
2. Create an Organizational forms library in **Exchange Management Shell** using the following command:

```
New-PublicFolder -Path "\NON_IPM_SUBTREE\EFORMS REGISTRY" -Name
"Organizational Forms" -vb
```

Parameter "-vb" is optional; it gives the verbose output.


Machine: vmexfispt01 | Scope: exfispt.local
[PS] C:\Documents and Settings\Administrator>New-PublicFolder -Path "\NON_IPM_SU
BTREE\EFORMS REGISTRY" -Name "Organizational Forms" -vb

Check in Outlook (2007) that the public folder is shown in **Tools** / **Forms** / **Choose Form** / **Look in** down-drop box. In case of Outlook 2010/2013 check it under Home tab / New Items / More Items /

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Choose Form. Restart the Microsoft Exchange Information Store service if not (**Start** / **Programs** / **Administrative Tools** / **Services**).

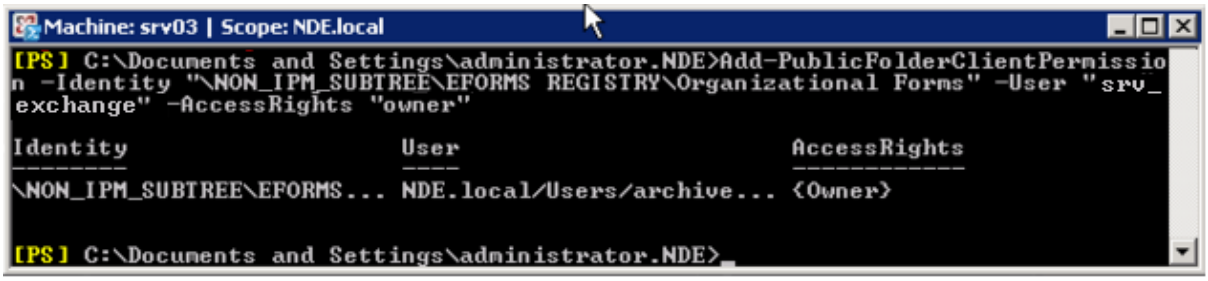
Other way how to bring the Organizational Forms on Outlook 2010 (if it didn't load up after creation), is just adding another PowerShell line **Set-PublicFolder "\NON_IPM_SUBTREE\EFORMS REGISTRY \Organizational Forms" -EFormslocaleID EN-US**.

Assigning owner rights to the super-user over the Organizational Forms library

The super-user will be publishing all Archive Manager forms in the Organizational Forms library. Therefore, that account must be given owner rights to this folder. To assign the rights to the super-user, follow these steps:

1. Run the **Exchange Management Shell** from **Start** / **Programs** / **Microsoft Exchange Server 2010** / **Exchange Management Shell**.
2. Now enter the following command to set access rights for super-user (srv_exchange):

```
Add-PublicFolderClientPermission -Identity "\NON_IPM_SUBTREE\EFORMS
REGISTRY\Organizational Forms" -User "srv_exchange" -AccessRights "owner"
```


Machine: srv03 | Scope: NDE.local
[PS] C:\Documents and Settings\administrator.NDE>Add-PublicFolderClientPermissio
n -Identity "\NON_IPM_SUBTREE\EFORMS REGISTRY\Organizational Forms" -User "srv_
exchange" -AccessRights "owner"
Identity User AccessRights
\NON_IPM_SUBTREE\EFORMS... NDE.local/Users/archive... {Owner}
[PS] C:\Documents and Settings\administrator.NDE>

First parameter is a path to the Organizational Forms library. Second parameter is a name of the super-user, which will be granted the rights and third parameter is the **AccessRights** type which is usually supposed to be "Owner".

NOTES:

- If you are not sure what the name of the Organizational forms library is, the following command can be used. It will grant permissions for the child objects under EFORMS REGISTRY:

```
Get-PublicFolder -Identity "\NON_IPM_SUBTREE\EFORMS REGISTRY" -GetChildren
```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```
| Add-publicfolderclientpermission -User srv_exchange -AccessRights Owner
```

- It may take some time until the super-user is assigned owner rights over the **Organizational Forms** library.

Tips & Tricks: If there are any issues with assigning rights over Organizational Forms Library, you can download Microsoft **ExFolders** from:

http://msexchangeteam.com/archive/2009/12/04/453399.aspx

This tool can facilitate the process of assigning rights over different Exchange Server folders. It can be used for MS Exchange Server 2010.

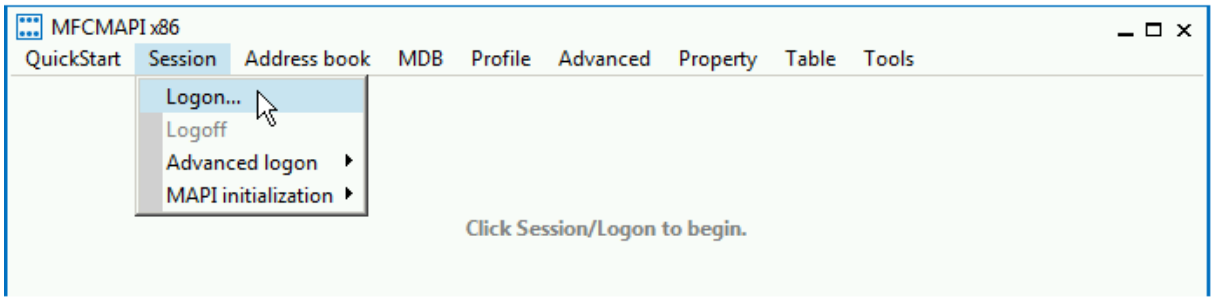
Setting up language for the forms folder

After we have successfully created Organizational forms library, its language needs to be set up. To do so, download the Microsoft's MAPI Editor tool from the Microsoft download center to the machine with Outlook installed. The current location for download is:

http://mfcmapi.codeplex.com/
(go to download and select the latest release)

1. Start the Microsoft's **MAPI Editor** tool on any client computer, where Outlook is installed and profile(s) are present.
   NOTE: Should you have Outlook installed also on your Archive Manager server, you can launch the MAPI Editor on that machine as well.

2. To display the store tables unfold the **Session** menu and select **Logon** command.



3. The store tables are displayed then. Right-click the Public Folder store. From the context menu select **Open store** or double-click the store to open it.

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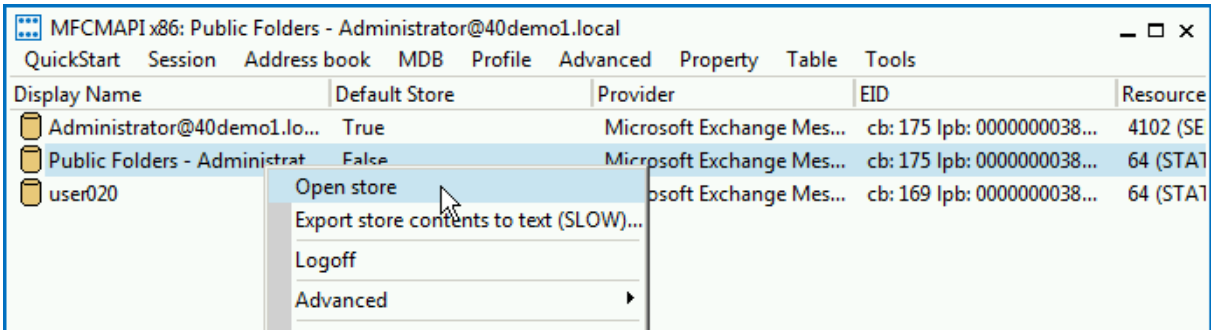
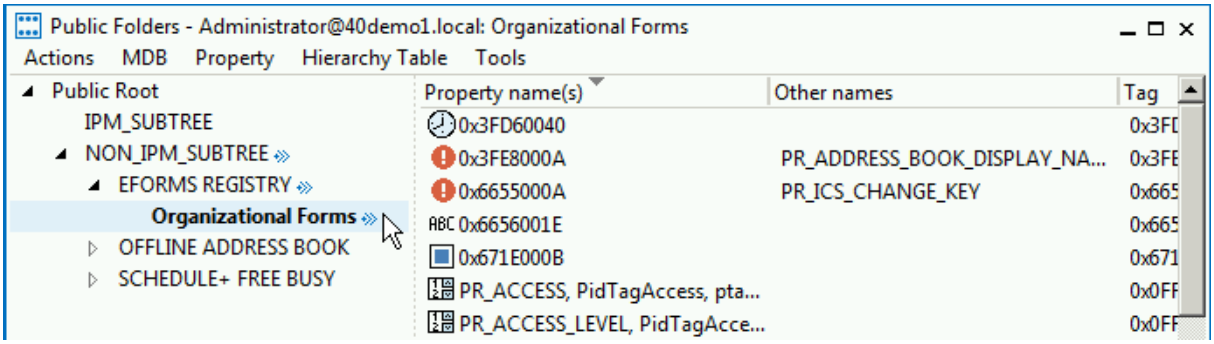
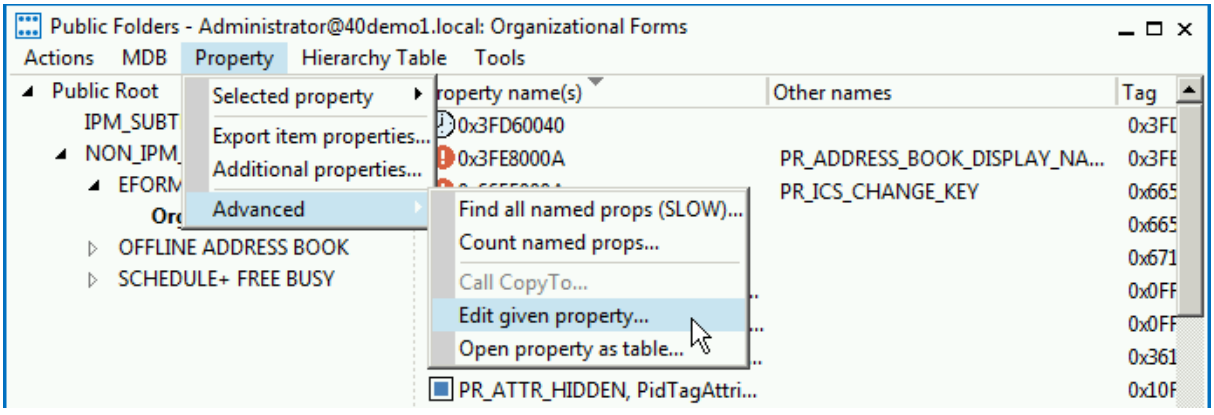

MFCMAPI x86: Public Folders - Administrator@40demo1.local
QuickStart Session Address book MDB Profile Advanced Property Table Tools
Display Name Default Store Provider EID Resource
Administrator@40demo1.lo... True Microsoft Exchange Mes... cb: 175 lpb: 0000000038... 4102 (SE
Public Folders - Administrat False Microsoft Exchange Mes... cb: 175 lpb: 0000000038... 64 (STA
user020 soft Exchange Mes... cb: 169 lpb: 0000000038... 64 (STA
Open store
Export store contents to text (SLOW)...
Logoff
Advanced

4. A new window with public folders appears. Unfold the tree in the left pane down to **Public Root \ NON_IPM_SUBTREE \ EFORMS REGISTRY \ Organizational Forms**.



5. Click on the **Property** tab on the menu bar and from the down-drop menu select **Edit given property** option.



6. In the new window click enter the number 0x3FE90003 in the **Property tag** text box. It defines the PR_EFORMS_LOCALE_ID property. Check it in the *Property name* box. Then click **OK**.

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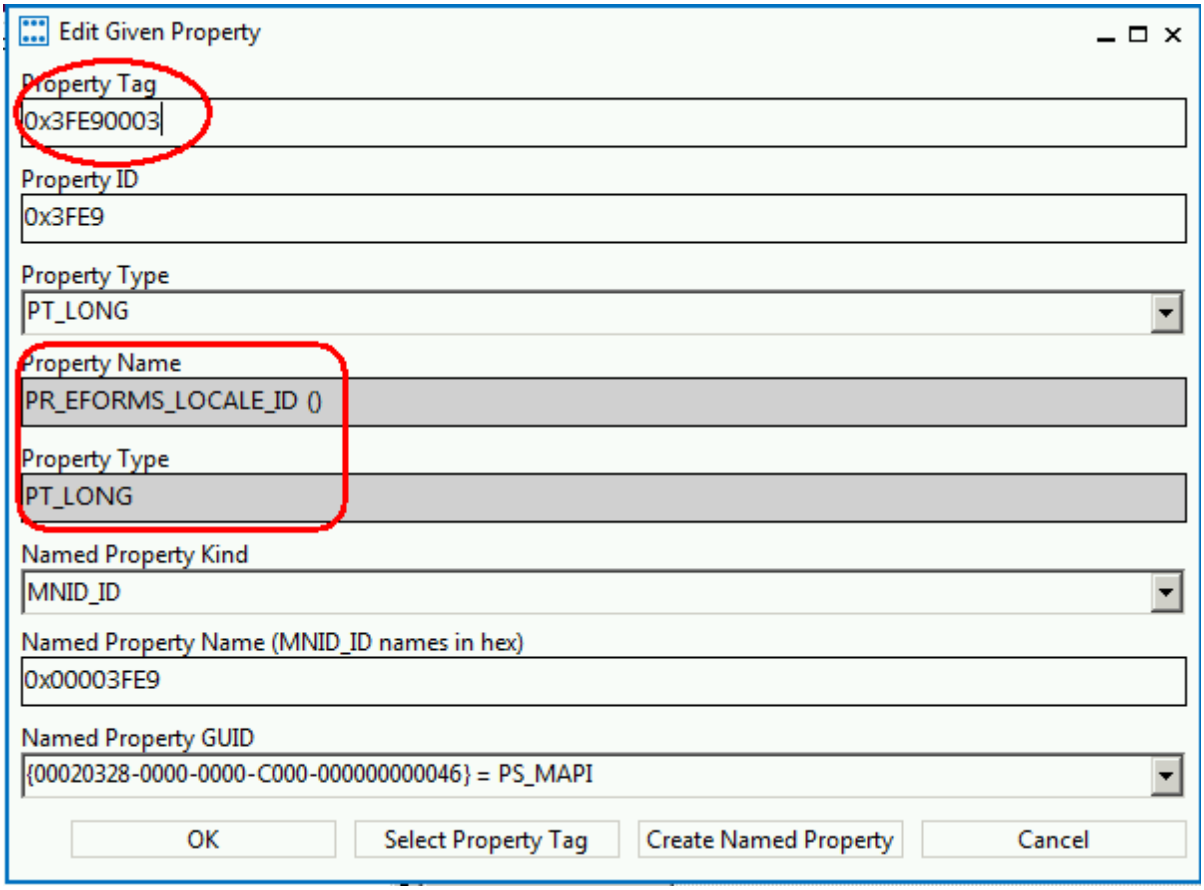

7. In the pop-up **Property Editor** window type the required locale ID (1033 for English) in the **Unsigned Decimal** box and click **OK**:

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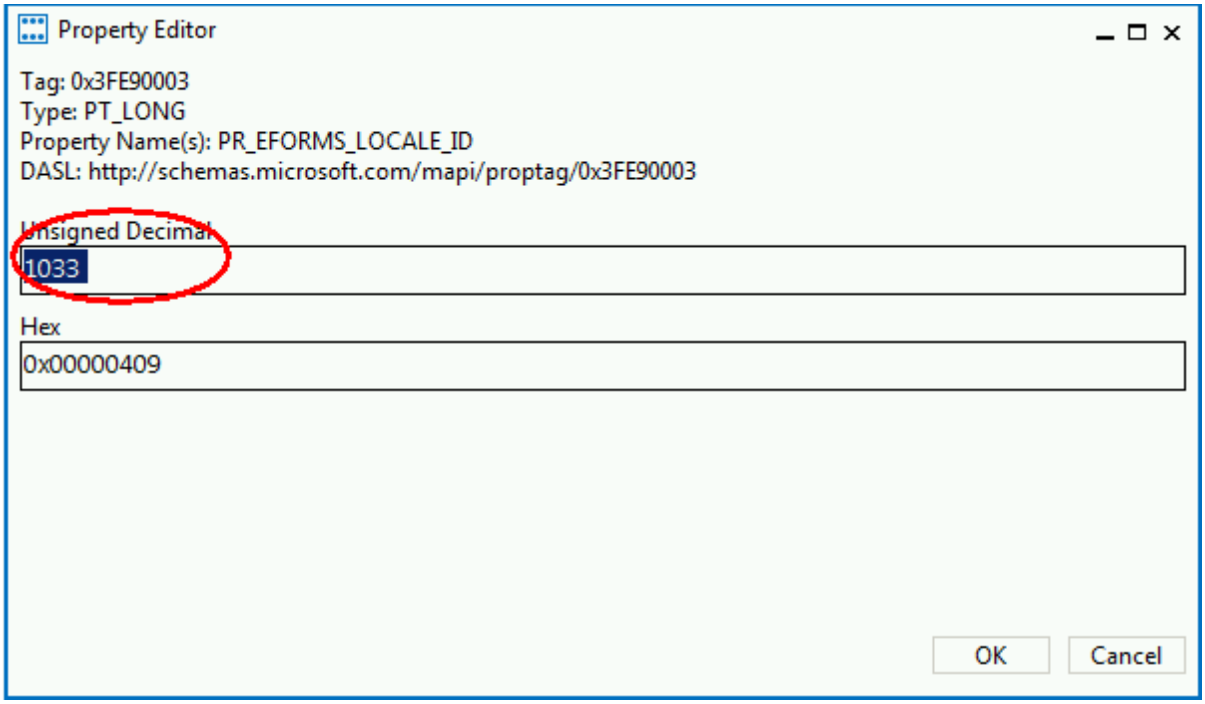
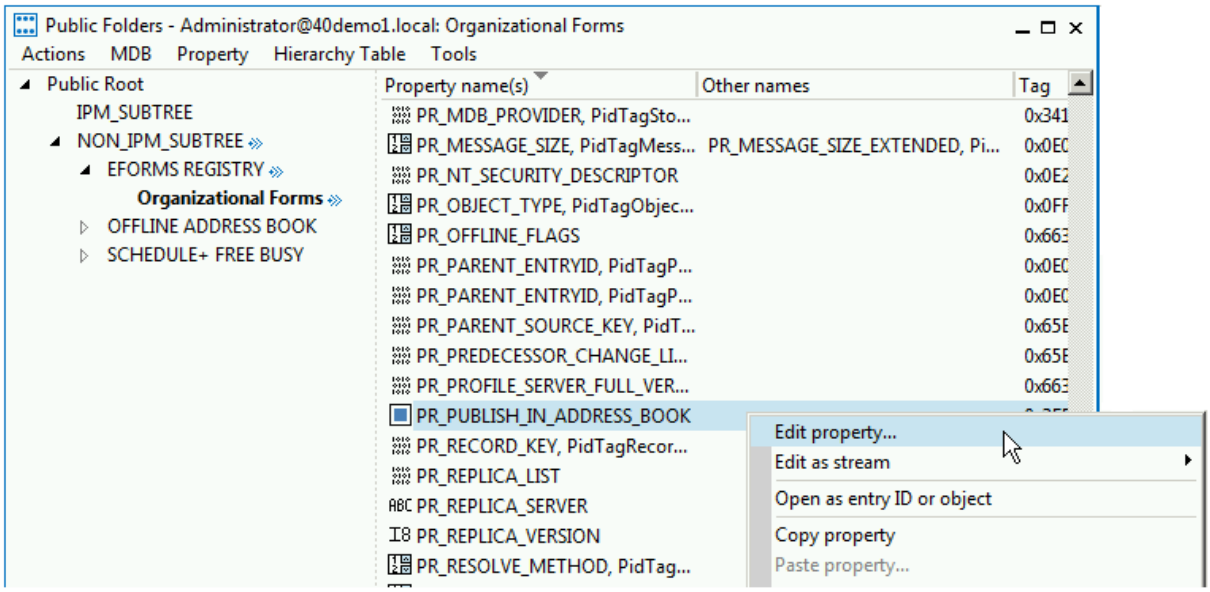


8. Back in the **Folder Tree** window locate the **PR_PUBLISH_IN_ADDRESS_BOOK** property in the right pane. Right-click it and select **Edit** property.



NOTE: If this property does not exist, you have to create it. Click **Property** / **Additional properties**. Click **Add** and enter the number 0x3FE6000b in the **Property tag** text box. It defines the PR_PUBLISH_IN_ADDRESS_BOOK property. Check it in the *Property name* box. Click **OK** and **OK** again.

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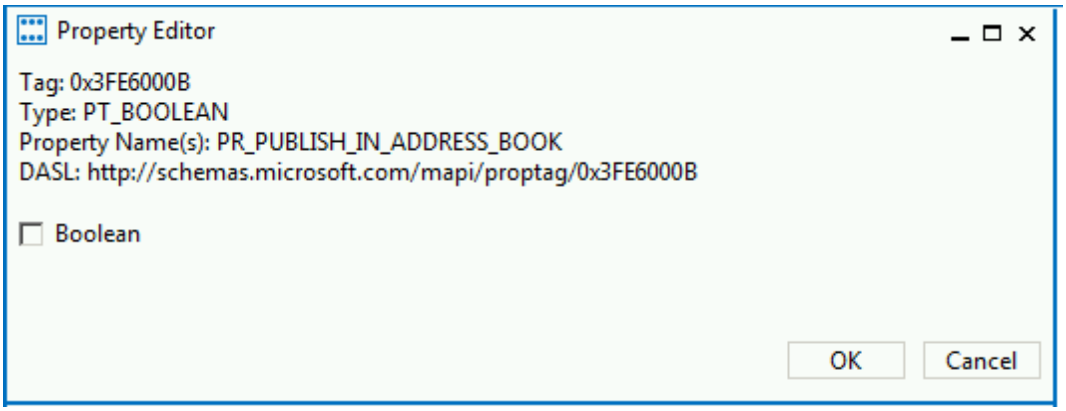
9. Uncheck the **Boolean** check box and click **OK**.



10. Finally close the **Folder Tree** window and exit MAPI Editor by selecting **Session/Logoff** menu command.

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Installing Archive Manager Exchange Edition

LAN Architecture

Before installing Archive Manager Exchange Edition, we need to mention something about the type of LAN you may have, which basically consists of:

- MS Exchange Server, (must be a **SEPARATE MACHINE**)

- Database Server,
- Archive Manager Server,
- HSM Server and
- Archive Manager Search Server (optional).

In the most basic configuration all servers EXCEPT MS EXCHANGE can be installed on one machine. However, more advanced configurations are recommended.

Archive Manager is a product of high scalability and administrators can decide for various LAN solutions. For instance, maximum 3000 mailboxes can be archived with one Archive Manager Archive server. If more than 1000 mailboxes are being archived, we recommend dedicating an additional server where only the Archive Manager retrieve part will reside. In this manual we describe two LAN configurations in detail:

Common config (containing **ONE** Archive Manager server)

- MS Exchange Server (one machine)
- Database Server, Archive Manager Server, HSM Server, Archive Manager Search Server, PST Import Server (second machine)

LoadBalancing config (containing **MORE** Archive Manager servers)

- MS Exchange Server (one machine)
- Database Server (second machine)
- one Archive Manager Archive Server (third machine) (with optional PST Import)
- one Archive Manager Retrieve Server (fourth machine)
- HSM and Archive Manager Search Server (fifth machine)

HSM server setup and optional Archive Manager Search server setup must be installed first - **1st part of the installation** section.

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Then run the Archive Manager setup on all other servers (except the Exchange and Database Server) – **2nd part of the installation** section.

NOTE: To achieve load balancing and enable multiple archiving for large organizations scattered around the globe, Archive Manager provides you with the possibility to configure several Archive Manager Archive servers distinguished by a unique identifier – the LocationID. More servers can be assigned to ONE location:

- ONE Archive server
- several Retrieve servers and/or
- PST Import servers.

For example: one Archive Manager archive service for daily business, one PST Import archive service and several retrieve services operating in parallel.

(For more info see the note at the end of the "Installing Archive Manager Exchange Edition" chapter.)

1st part of the Archive Manager installation – HSM and Archive Manager Search

After you have decided on your Archive Manager configuration solution, you can start installing Archive Manager. As was mentioned before, the first step is to install:

- the HSM Server which takes care of storing and retrieving emails and
- optionally the Archive Manager Search Server if you wish to use the fulltext search

NOTE: When running the Archive Manager Search setup, you can choose from different fulltext search engines:

- Archive Manager Search (recommended)
- MS Search integration

NOTE: Both HSM and Archive Manager Search can be installed by separate setups or by using the Archive Manager installation package. For detailed information on how to install and configure the HSM and Archive Manager Search see the following manuals:

- HSM Installation and Configuration
- Archive Manager Search

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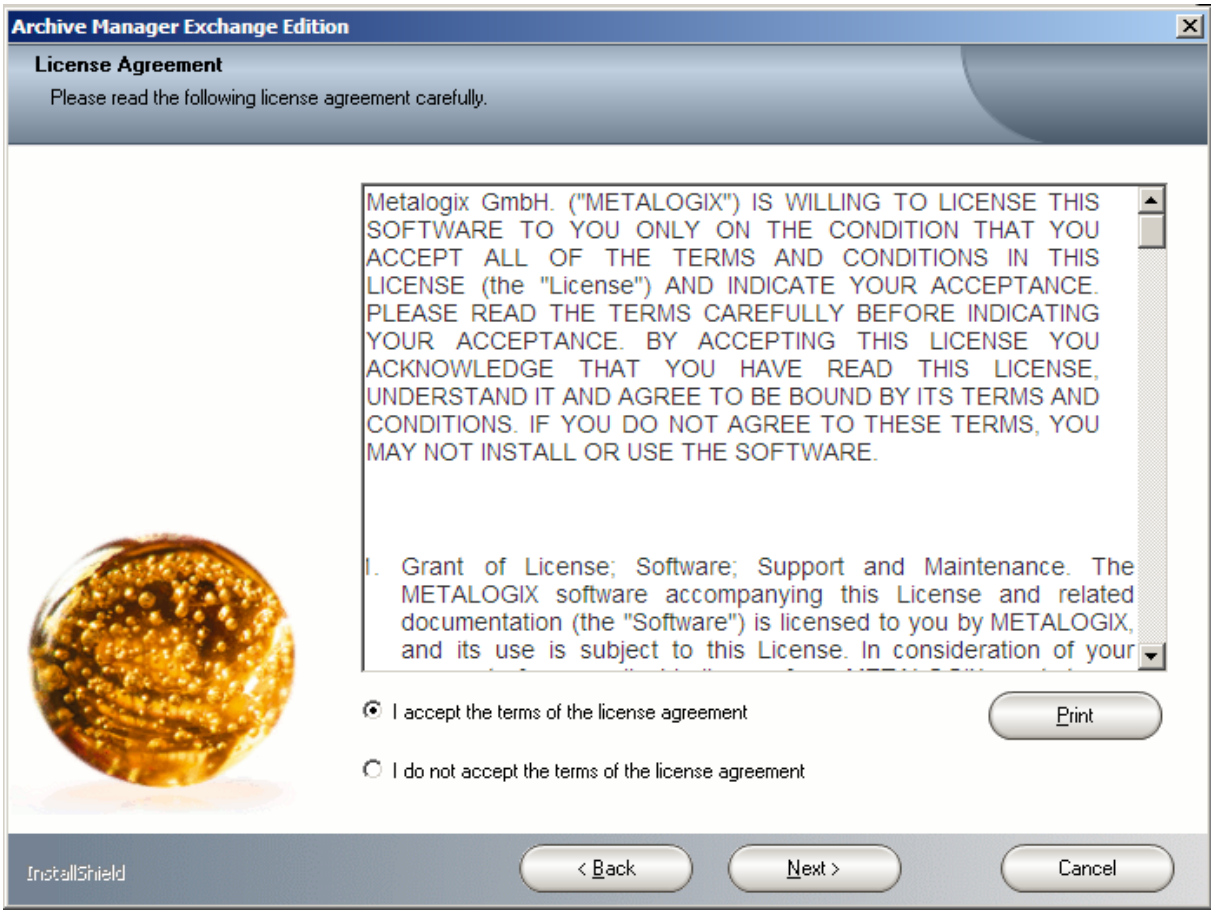
2nd part of the Archive Manager installation: Components Selection

When your HSM and Archive Manager Search are installed, you can continue with the Archive Manager installation. We will use the separate Archive Manager Exchange Edition setup. This setup is also a part of Archive Manager Installation Package. You can run the installation package and then select just the *Metalogix Archive Manager Exchange Edition* component.

NOTE: Make sure that all MMC applications (the System Manager tool, the Services window etc.) are closed before running the Archive Manager setup. Run the setup while being logged on to the server with a domain account with local administrative permissions.

On the Welcome page click **Next**.

On the License Agreement page read the license agreement. If you agree, select the **I accept the terms of the license agreement** option and click **Next** to continue.


Archive Manager Exchange Edition
License Agreement
Please read the following license agreement carefully.
Metalogix GmbH. ("METALOGIX") IS WILLING TO LICENSE THIS SOFTWARE TO YOU ONLY ON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS AND CONDITIONS IN THIS LICENSE (the "License") AND INDICATE YOUR ACCEPTANCE. PLEASE READ THE TERMS CAREFULLY BEFORE INDICATING YOUR ACCEPTANCE. BY ACCEPTING THIS LICENSE YOU ACKNOWLEDGE THAT YOU HAVE READ THIS LICENSE, UNDERSTAND IT AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. IF YOU DO NOT AGREE TO THESE TERMS, YOU MAY NOT INSTALL OR USE THE SOFTWARE.
1. Grant of License; Software; Support and Maintenance. The METALOGIX software accompanying this License and related documentation (the "Software") is licensed to you by METALOGIX, and its use is subject to this License. In consideration of your
I accept the terms of the license agreement
I do not accept the terms of the license agreement
Print
InstallShield
< Back
Next >
Cancel

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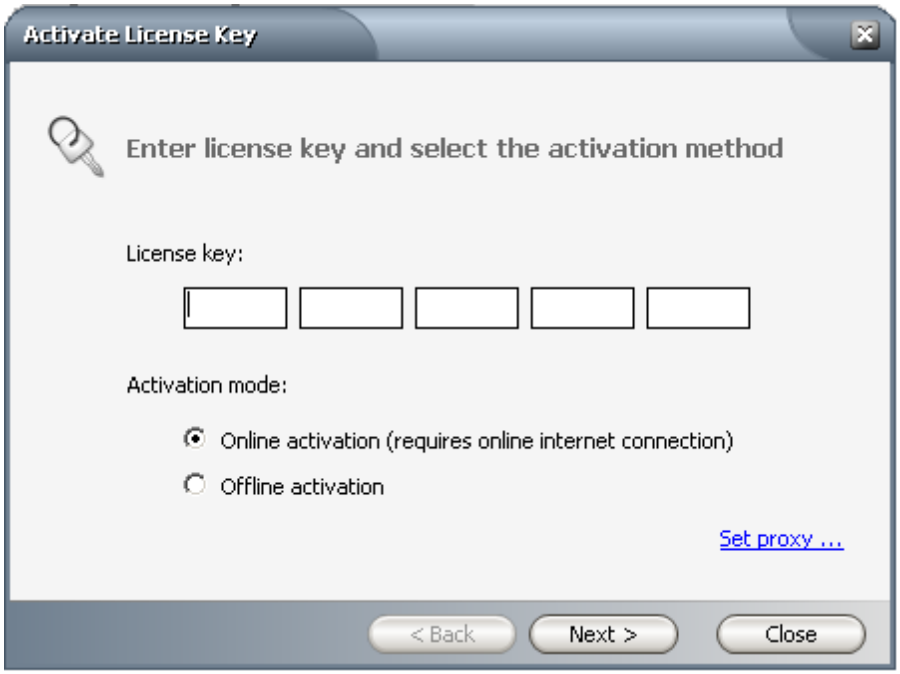
Before proceeding with installation, you need to apply the license. There can be two different situations:

- Archive Manager server has an internet connection (a)
- Archive Manager server has NO internet connection (b)

a) If Archive Manager server has an internet connection, follow the next steps:

- Enter your license key and click **Next**.
  NOTE: If the internet access is filtered out by proxy on the Archive Manager server, click the **Set proxy** link to enter the respective parameters.
- License will be validated and you can continue the installation.



b) If the Archive Manager server has NO internet connection, follow the next steps:

- Insert your license key.
- Select the **Offline activation** radio button and click Next.
- Copy the *Activation request* text from the **Activation request** text box or save it as a file (click the *Save* to file link)
- On the machine with internet access open the Metalogix Activation URL:
  http://www.metalogix.com/OfflineActivation
- Paste the *Activation Request* text you have copied or **Browse** for the file you have saved and click **Activate**
- *Activation text* is generated. Again copy the text or save it as a file
- Back on the Archive Manager server click **Next** to proceed to the **Enter your Activation Response** dialog. Paste the *Activation text* you have copied from the Metalogix web page or load the file.

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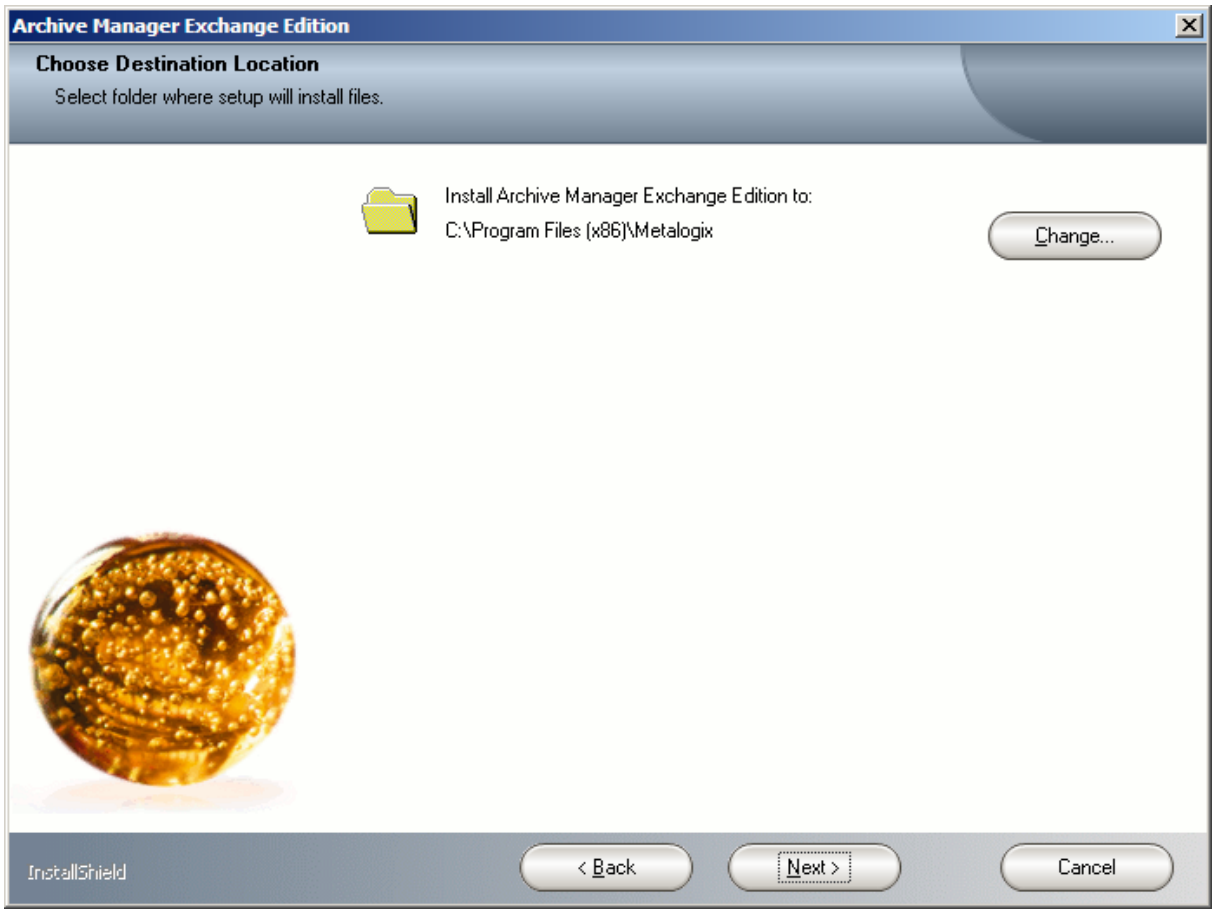
- Click **Next**, then **Finish**.

In the next window you can check the location where the Archive Manager folder with all the application necessary files will be installed. The default destination location is **C:\Program Files\ Metalogix**. You can use the **Change** button to change the destination directory, if you wish. Then click **Next**.



The next step is very important as in the following dialog (**Select Features** window) you are selecting which features of Archive Manager will be installed. We will describe how to select the features in a separate section (see the following sections “Description of the features” as well as the section “How to select the features”). You must select appropriate features depending on your LAN configuration.

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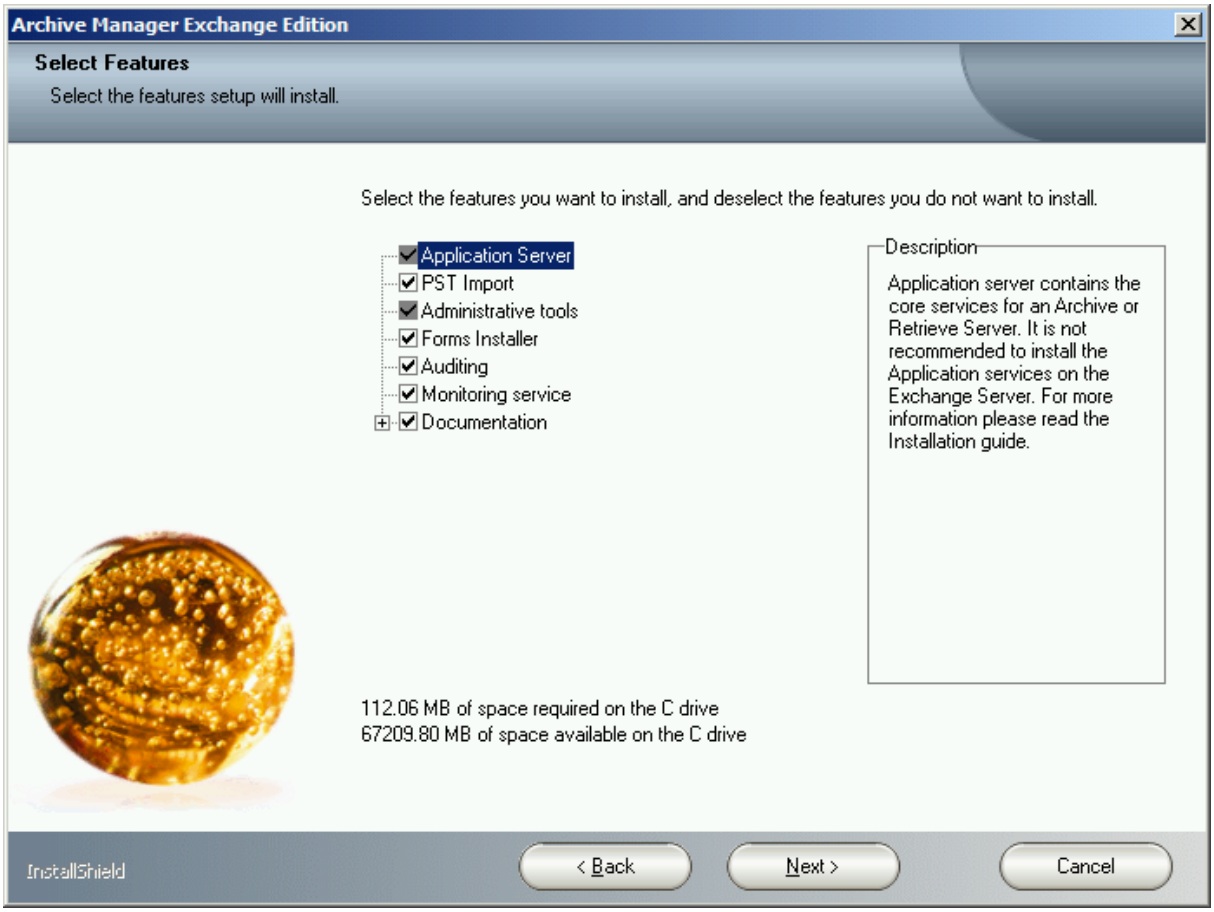
Archive Manager Exchange Edition
Select Features
Select the features setup will install.
Select the features you want to install, and deselect the features you do not want to install.
Application Server
PST Import
Administrative tools
Forms Installer
Auditing
Monitoring service
Documentation
Description
Application server contains the core services for an Archive or Retrieve Server. It is not recommended to install the Application services on the Exchange Server. For more information please read the Installation guide.
112.06 MB of space required on the C drive
67209.80 MB of space available on the C drive
InstallShield
< Back
Next >
Cancel

Description of the features

Application Server

Please select this option only for the computer where Archive Manager Server will be running. By selecting this option you will install the basic components of Archive Manager.

PST Import

As for PST Import, it is an application collecting and archiving users' PST files. It can be used only on the machine where MS Outlook is installed.

Supported Outlook versions:

- Outlook 2007
- Outlook 2010 (32bit)
- Outlook 2013 (32bit)
- Outlook 2016 (32bit)

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(For more information on how to use and configure the PST Importer, see the "Administrator manual for PST Importer".)

IMPORTANT NOTE: The **PST Import** component can easily be installed on any machine with the following minimum requirements:

- Windows Server 2008 R2 SP1
- .NET Framework 2.0 SP2
- Outlook 2007

Administrative tools

By selecting this option you will install the **Configuration** tool and the **Enterprise Manager**, which are included among administrative applications of Archive Manager.

These tools can be installed and used on several computers. For instance, you may decide to use Enterprise Manager not only on the machine where Archive Manager Server is running (i.e. not only on the machine where **Application server** is selected during setup). In that case you must select ONLY **Administrative tools** when running **Archive Manager Exchange Edition** setup on the new machine. Several users can then have access to full management of Archive Manager.

Forms Installer

Forms Installer contains custom forms and FormsInstaller.exe tool which publishes the forms in the Organizational Forms Library. It can only be used on a computer where Outlook is running. You can also choose any client machine with Outlook 2016 (32bit) / 2013 (32bit) / 2010 (32bit) / 2007 and .NET Framework 2.0 SP2 installed to be able to publish the forms.

NOTE: There is always a **FormsInstaller setup** to be downloaded together with the Archive Manager setup. This smaller setup installs the **FormsInstaller.exe** tool on the client machine.

Auditing

Auditing allows administrator to log defined user actions in the email archive, i.e. administrator has an overview of user actions as archiving, retrieving, restoring and even executed fulltext searches (in Outlook and ArchiveWeb). This feature can be installed on Archive Manager server or on a separate machine (for detailed information see the "Auditing manual").

Monitoring service

This service is implemented since v5.1. It automates monitoring of other Archive Manager (MAM) services and alerts administrator via notification email if necessary. Notification mail is send only if

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some error occurs. For more information see the "MAM services – Basic description" manual.

Documentation

Available documents

All in all, certain restrictions and recommendations regarding LAN architecture need to be taken into account when installing Archive Manager. Basically the MS Exchange Server and Archive Manager Server should be on different computers, i.e. two separate machines (for more information see the section "LAN Architecture").

IMPORTANT NOTE: There is a special **Archive Manager Exchange Edition_64bit_Extensions** setup to be downloaded together with the Archive Manager Exchange Edition setup. This **Archive Manager Exchange Edition_64bit_Extensions** setup installs Exchange Server Tools which are necessary for reading permissions and Archive Manager components for OWA 2010 (optional).

Archive Manager Exchange Edition_64bit_Extensions setup is dedicated to run only on Exchange 2010 Server running Windows Server 2003 (64bit) (see the "Archive Manager Exchange Edition Installation of Optional Features" manual)**.**

How to select features for various types of LAN

As mentioned in "LAN Architecture" section Archive Manager is a product of high scalability and administrators can decide for various types of LAN. It is important to select the correct features for your servers when installing Archive Manager. Further we discuss two most common LAN configurations in detail:

- containing ONE Archive Manager Server ("Common config")
- containing MORE Archive Manager Servers ("LoadBalancing config").

I. Common config

Possible LAN configuration:

- MS Exchange Server (one machine)
- Archive Manager Server, HSM Server, Archive Manager Search Server, PST Import Server, Database Server (second machine)

Please select the features on the **Select Features** page as described below:

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When running the Archive Manager setup on the second machine, select **Application Server**. To enable ArchiveWeb application, select also **ArchiveWeb**. If you plan to use administrative applications on the server as well, select **Administrative tools**. Select **Auditing** if you want to deploy auditing feature and **Monitoring service** if you want to deploy monitoring as well.

You can select also **FormsInstaller** and **PST Import** features.

NOTE: HSM and Archive Manager Search have been installed on the machine separately (1st part of the installation).

NOTE: The only components installed on the Exchange Server are **Exchange Server Tools** necessary for synchronizing permissions and/or **OWA 2010 extension** (optional). They are installed with the **Archive Manager Exchange Edition_64bit_Extensions** setup which can be downloaded together with the Archive Manager Exchange Edition setup (see the "Post Installation tasks" section).

For OWA 2010 extension installation see the "Archive Manager Exchange Edition Installation of Optional Features" manual.

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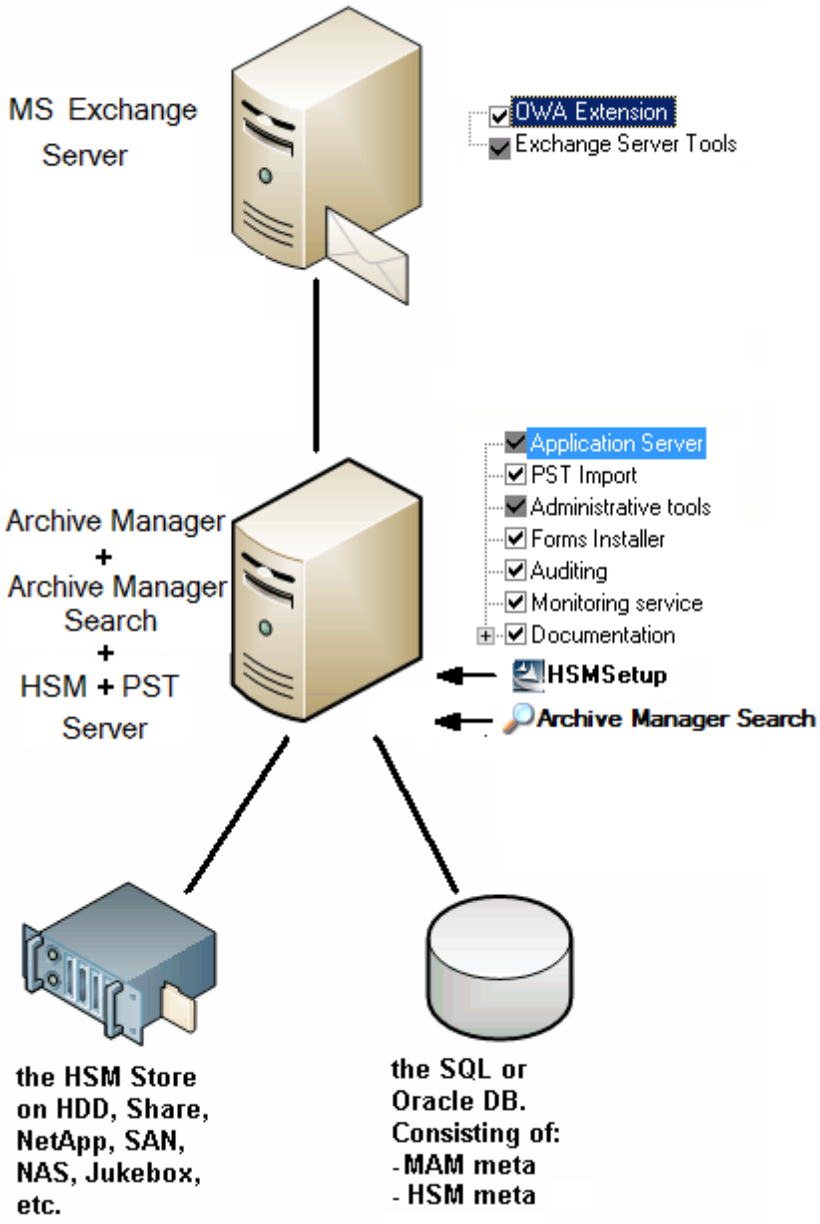

II. LoadBalancing Config

Possible LAN configuration:

- MS Exchange Server (one machine)
- Database Server (second machine)
- one Archive Manager Archive Server (third machine) (with optional PST Import)
- one Archive Manager Retrieve Server (fourth machine)

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- HSM and Archive Manager Search Server (fifth machine)

NOTE: Provided that you wish to have two or more Archive Manager servers, the Archive Manager installation has to run on all of them. When the whole installation process is completed the servers have to be assigned the "Archive server" role and "Retrieve server" role respectively using **Enterprise Manager** application (**Enterprise Manager** / **Tools** / **Options** / **Server settings** tab) – as will be described later.

Please select the components as described:

When running Archive Manager setup on the computers where Archive Manager Servers should be installed, select **Application Server** for both of them and also **Administrative tools** if you plan to use administrative applications on the servers as well. To enable **ArchiveWeb**, select this feature on one of the Archive Manager Servers. To enable **Auditing**, select this feature also on one of the Archive Manager Servers. **Monitoring service** feature can be installed on each Archive Manager Server. Optionally select also **PST Import** if you plan to use this feature.

HSM and Archive Manager Search are installed on the HSM and Archive Manager Search server by separate setups as described in the 1st part of the installation.
There is no need to run the installation on the Database Server and MS Exchange Server.

NOTE: The only components installed on the Exchange Server are **Exchange Server Tools** necessary for synchronizing permissions and/or **OWA 2010 extension** (optional). They are installed with the **Archive Manager Exchange Edition_64bit_Extensions** setup which can be downloaded together with the Archive Manager setup (see the "Post Installation tasks" section).

For OWA 2010 extension installation see the "Archive Manager Exchange Edition Installation of Optional Features" manual.

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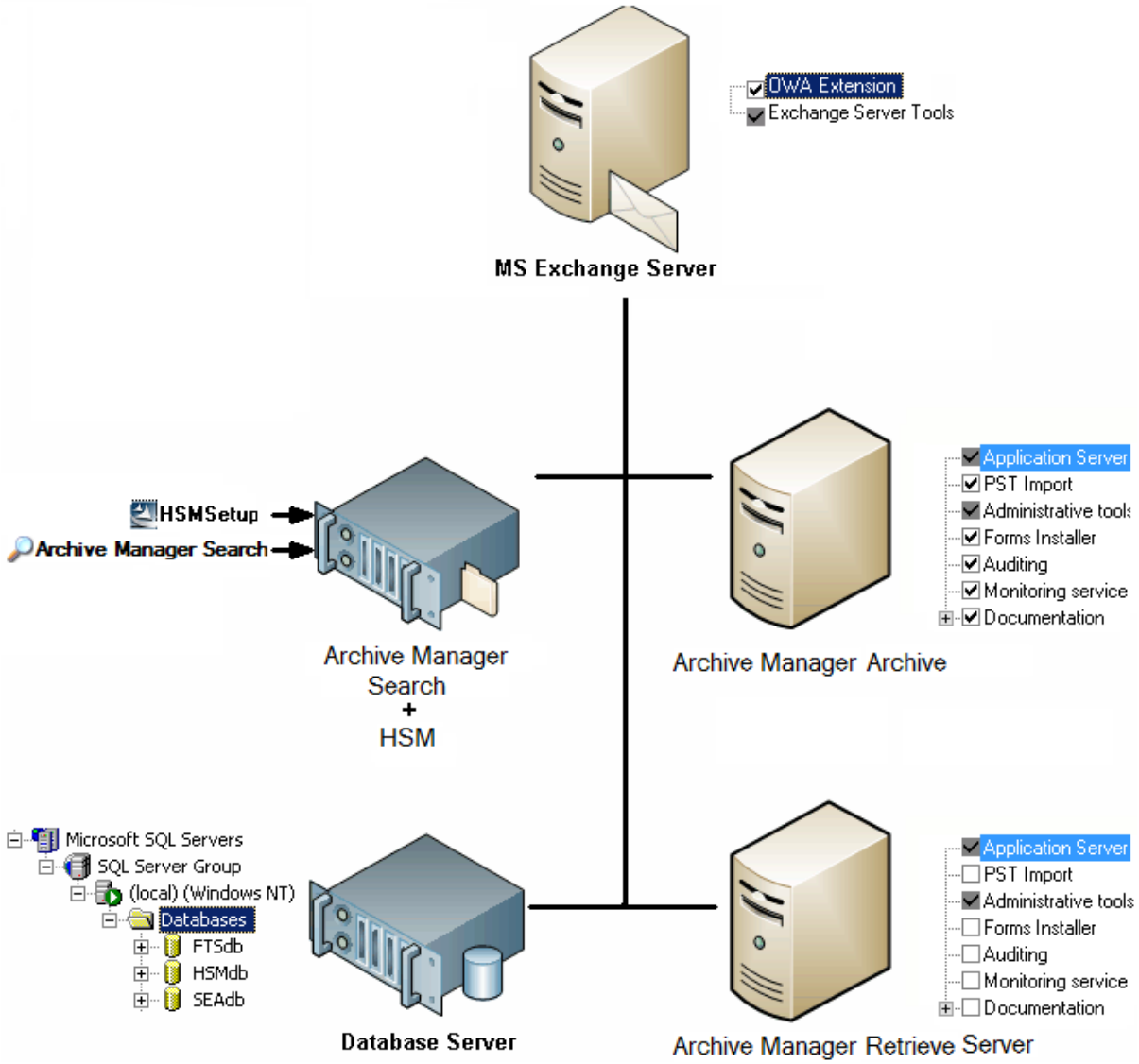

Finishing the installation

As the setup continues you are asked to allow Metalogix Exchange Extension to be added to the Exception list of the Windows Firewall. In this way the Archive service will be allowed to communicate through Windows Firewall.

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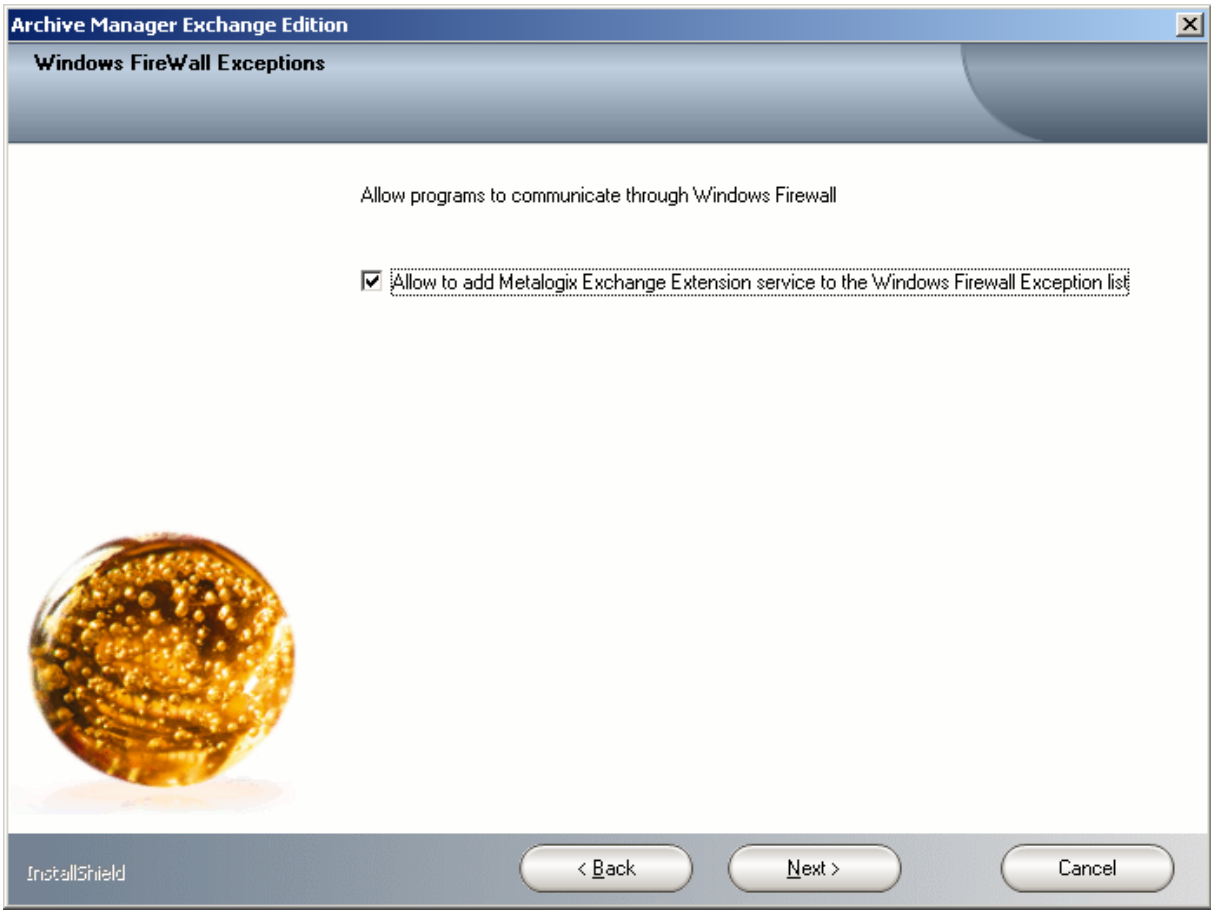
Archive Manager Exchange Edition
Windows FireWall Exceptions
Allow programs to communicate through Windows Firewall
Allow to add Metalogix Exchange Extension service to the Windows Firewall Exception list
InstallShield
< Back
Next >
Cancel

Then you are asked to specify the user account under which Archive Manager services will be running. Enter your super-user (*srv_exchange*) in the **User Name** text box in the DOMAIN\Username format. You can use the **Browse** button, to locate the user. Fill in the super-user's password in the **Password** and **Confirm Password** text boxes. Click **Next**.

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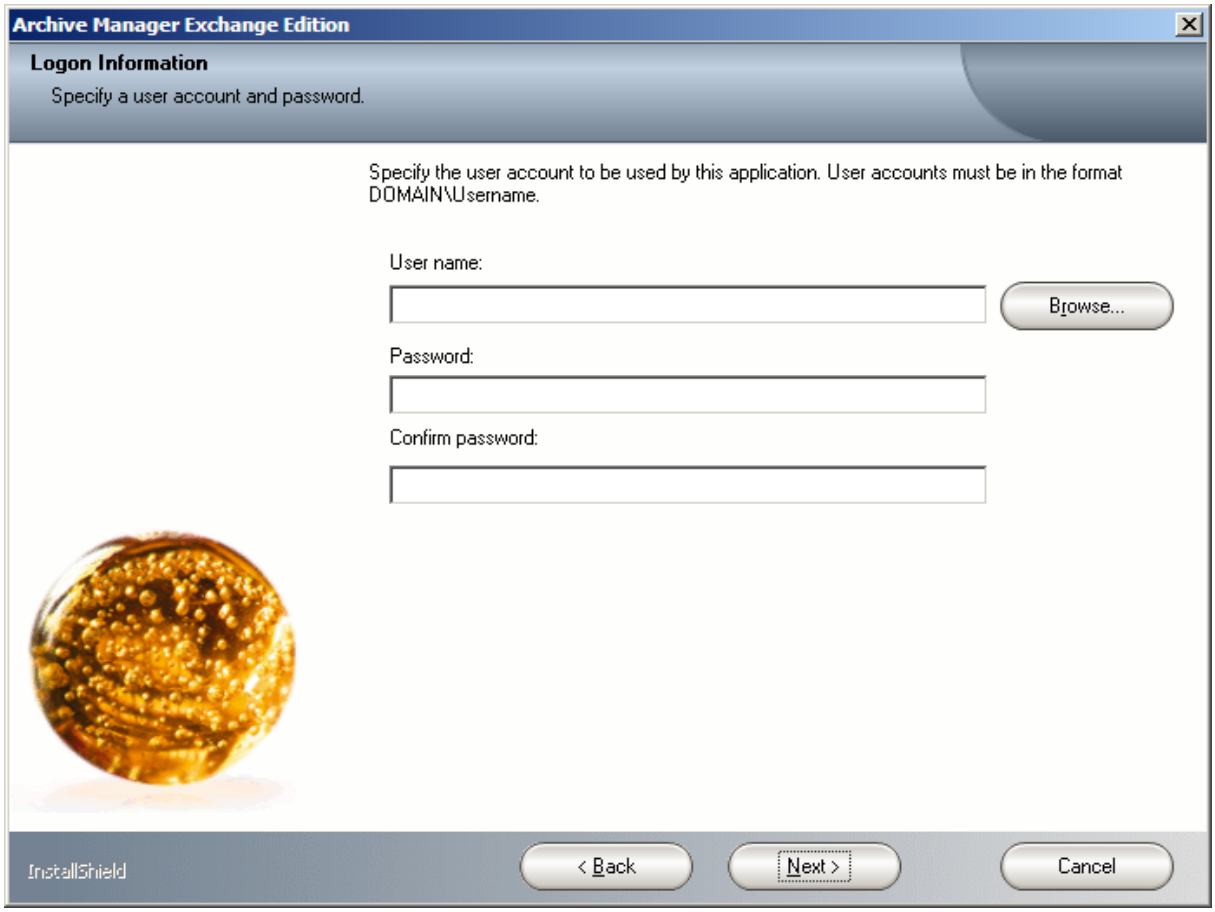

In the next window enter the NETBios name of your HSM Server, i.e. the computer where you have run the HSM setup (see the 1st part of the installation). You can use the **Browse** button to locate the server. Then click **Next**.

NOTE: Click the **Test server** button if you want to test the connection to the HSM server.

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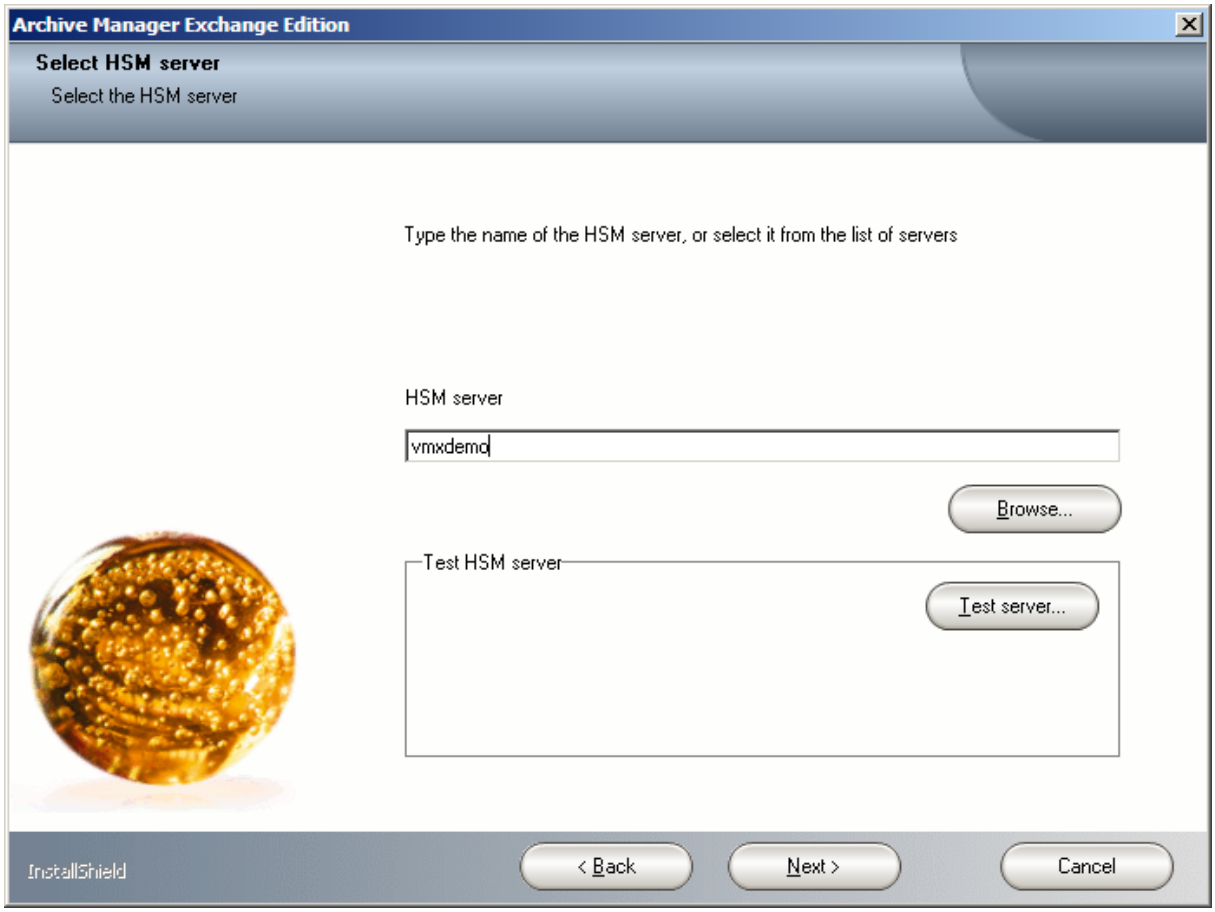

Then you are asked to enter the NETBios name of your Fulltext Server, i.e. the computer where you have run the Archive Manager Search setup (see the 1st part of the installation). You can use the **Browse** button to locate the server. Then click **Next**.
NOTE: Click the **Test server** button if you want to test the connection to the Fulltext server.

Archive Manager Search is optional. If you do not have Archive Manager Search Server installed, uncheck the **Enable Fulltext search** check box and click **Next**.

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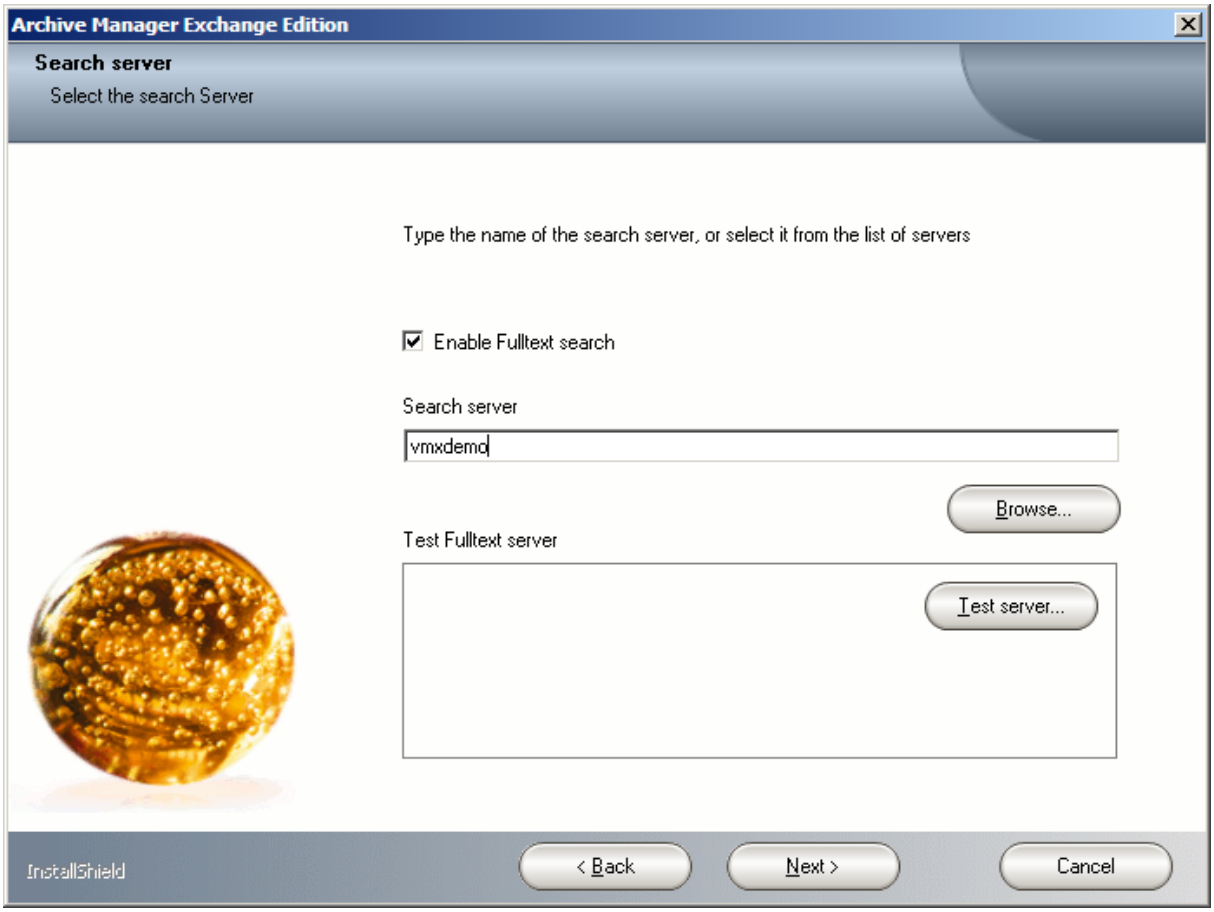

Finally click **Install**.

When the installation has finished, click the **Finish** button. As the Archive Manager installation finishes, the **Postinstallation** window opens with all necessary post-installation tasks listed. We describe them in the following chapter.

IMPORTANT NOTE:

If your LAN configuration requires more than one Archive Manager Archiving server in one domain (especially in case of large organizations demanding multiple archiving), Archive Manager provides you with the possibility to configure several Locations with their Archive servers.

You must distinguish the intended Archive servers by the Location ID immediately after installation. As default the Location ID for every installation is 1. To change the Location ID, e.g. set Location ID to 2 for your 2nd Archive Manager Archive server, you have to change the following registry key values to "2":

- HKEY_LOCAL_MACHINE \ SOFTWARE \ Wow6432Node \ Heilig & Schubert \ exchangePAM \ MultiServerID
- HKEY_LOCAL_MACHINE \ SOFTWARE \ Wow6432Node \ Heilig & Schubert \ exchangePAM \ OfflineStorage \ LocationID

Assigning *Archive / Retrieve* server role to respective Archive Manager servers is accomplished in the

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Enterprise Manager on the **Tools** / **Options** / **Server settings** tab – will be described later.

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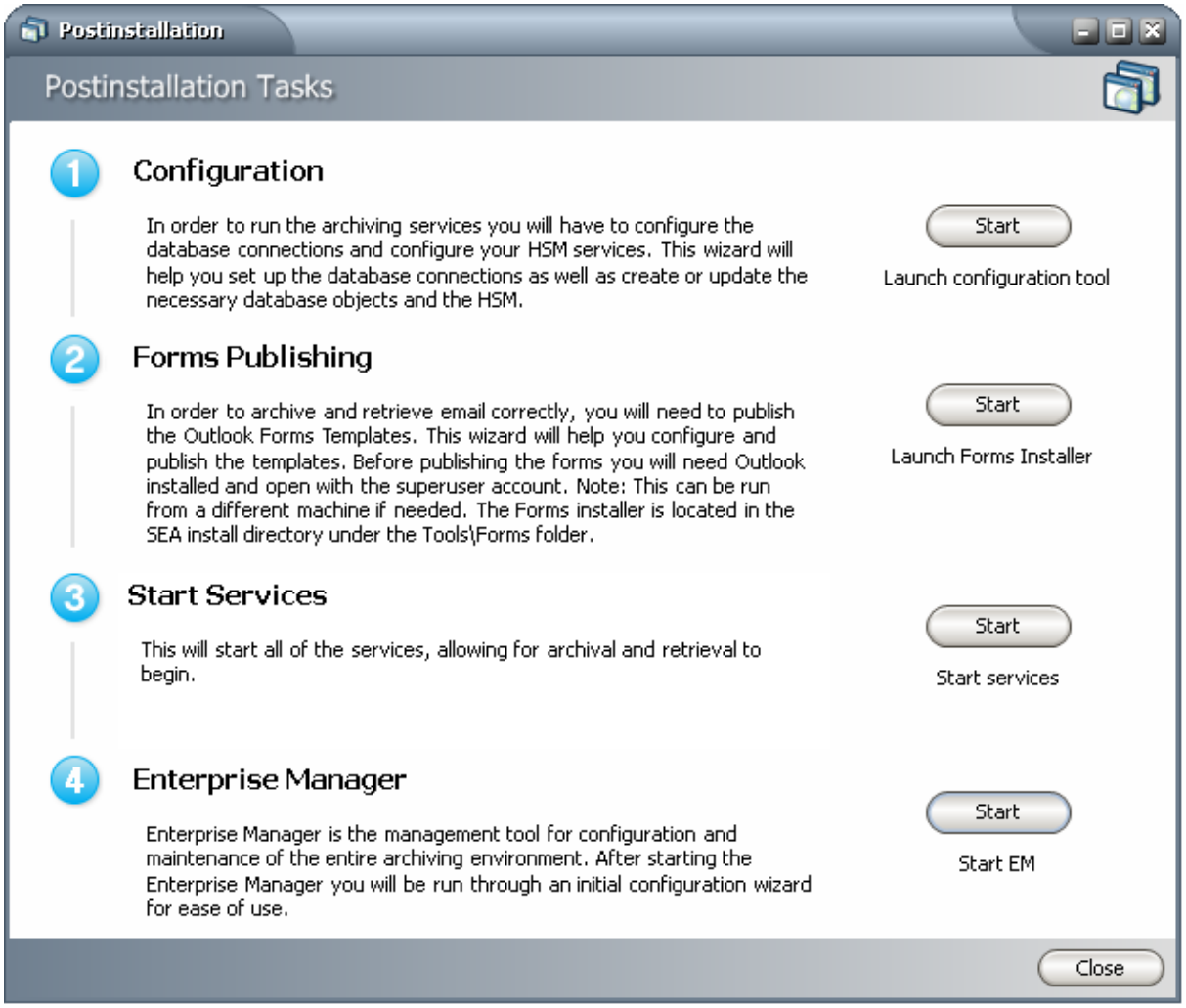
Post-installation tasks

As the Archive Manager Exchange Edition installation finishes you will be prompted the **Postinstallation** dialog. The list of post-installation steps varies for different parts of installation (Archive Manager Server, PST Server etc.).


Postinstallation
Postinstallation Tasks
1
Configuration
In order to run the archiving services you will have to configure the database connections and configure your HSM services. This wizard will help you set up the database connections as well as create or update the necessary database objects and the HSM.
Start
Launch configuration tool
2
Forms Publishing
In order to archive and retrieve email correctly, you will need to publish the Outlook Forms Templates. This wizard will help you configure and publish the templates. Before publishing the forms you will need Outlook installed and open with the superuser account. Note: This can be run from a different machine if needed. The Forms installer is located in the SEA install directory under the Tools\Forms folder.
Start
Launch Forms Installer
3
Start Services
This will start all of the services, allowing for archival and retrieval to begin.
Start
Start services
4
Enterprise Manager
Enterprise Manager is the management tool for configuration and maintenance of the entire archiving environment. After starting the Enterprise Manager you will be run through an initial configuration wizard for ease of use.
Start
Start EM
Close

This dialog lists post-installation tasks which have to be completed after installation:

1. **Configuration** - Configuring your already installed databases
2. **Forms Publishing** - Publishing the Custom Forms of Archive Manager
3. **Start Services** - Start the Archive Manager services
4. **Enterprise Manager** - Run the Enterprise Manager to start populating Archive Manager with users and mailboxes and archive the first emails.

The last task is to be completed on the Exchange Server (not included in the Postinstall dialog):

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5. **Exchange Server Tools** – installs tools necessary for reading permissions

For information on how to complete the tasks read the following sections. Each of the above mentioned steps can be done once you click the relevant **Start** button on the dialog. The **Postinstallation** tool can be launched also from **<installdir> \ Metalogix \ MAM4Exchange \ Tools \ LaunchTools \ LaunchTools.exe**.

Configuring the database

As suggested in the **Postinstallation** dialog, as a first step you need to configure your previously created database(s). To do so, just click the first **Start** button - *Launch configuration tool*. The database **Configuration** tool pops-up. This tool administers the database(s) which your Archive Manager software will use to keep meta-data in. The database(s) must be available before you run Archive Manager setup (see the Addendum "Creating an MS SQL database with a database user).

In this manual we use separate database for each component (*exchangeDB* for Archive Manager part, *hsmDB* for HSM part and *auditingDB* for Auditing part and *mtRoleDB* for Users part) and the same user for all (*srv_exchange*). The following lines describe only configuration of Archive Manager, Auditing and Users part. For HSM configuration see the "HSM Installation and Configuration" manual.

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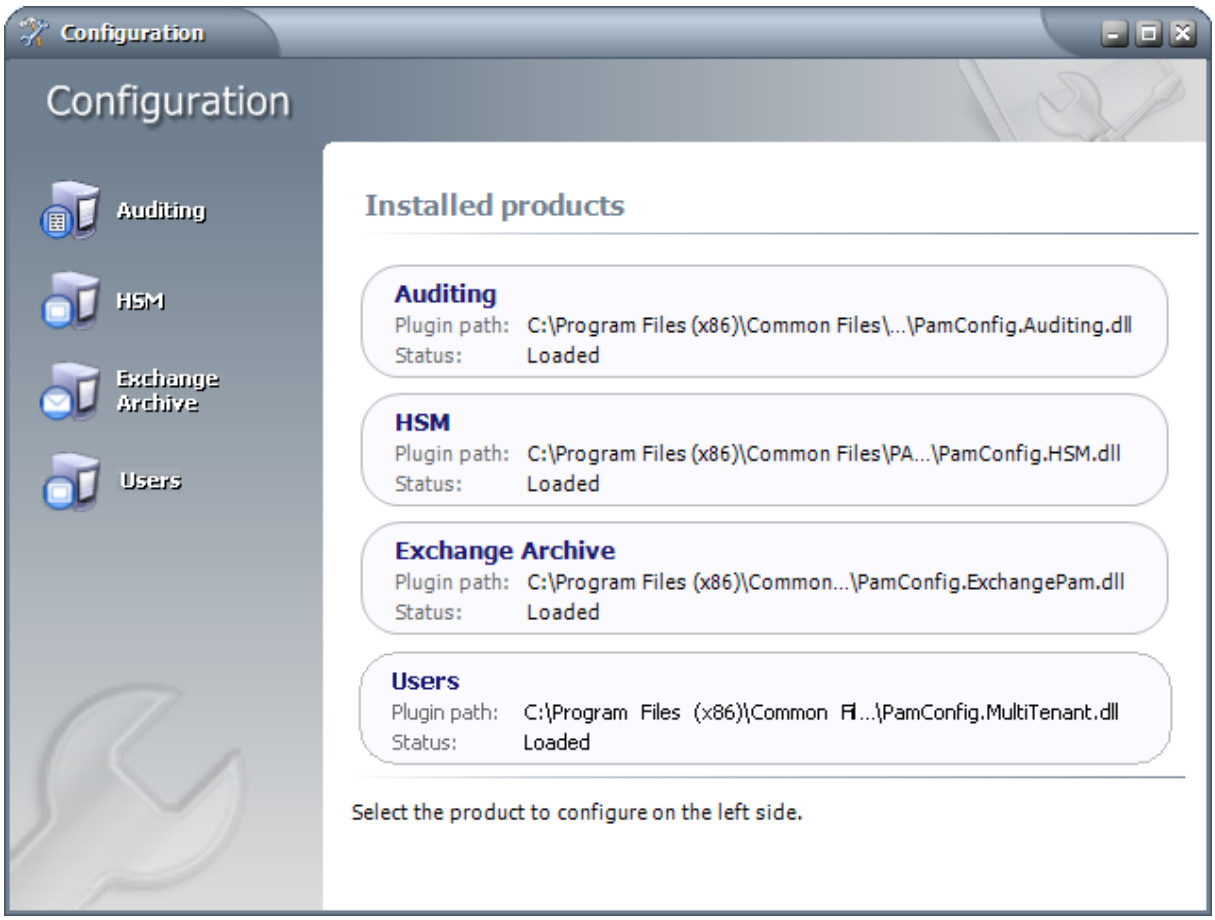

The **Configuration** tool has different tabs:

- **Auditing** – only in case that Auditing feature was selected during the installation
- **HSM** (which is configured after the HSM installation – see the "HSM Installation and Configuration manual")
- **Exchange Archive** (which is used to configure the Archive Manager)
- **Users** – should be configured for correct function of ArchiveWeb
- **Search** – only in case that MAM Search was installed as an optional feature
- **Fulltext** tab – only in case that old fulltext engine is used

You will notice that each tab of the tool (**Exchange Archive**, **HSM, Users** and **Auditing**) has 2 subsections - the *Configuration* section and the *Execute Scripts* section. Always start with the *Configuration* subsection, since you will first need to set the connection parameters in order to run the sql scripts.

IMPORTANT NOTE: Once configured, you **must NOT change the following values in the Configuration** tool on any of the tabs:

- **Initial Catalog**: this is the default Database where the system is writing and reading from.

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This name should never be changed, unless you do not specifically restore all the prior archived data back in Exchange and decide to start all over with a fresh new database for the product. If by mistake another database is used the old archived data is no longer reachable.

- **Table Owner**: this is the default table owner used by the product. This SQL Table owner must be always the same, even if you move the SQL databases from one SQL server to another. If another SQL Table Owner name is created and used for the archiving product all the tables will be re-created as duplicate and the system will write in the new table set. As an end-effect the old archived data will not be reachable anymore. For SQL 2008 / 2012 the Table Owner is the SCHEMA NAME of the database.
- **Server Name**: this is the name of the SQL server where the databases used by the Metalogix product are hosted. It is only allowed to change this name if the database(s) the Metalogix product uses are moved from one SQL server to another

In case of an ORACLE database, do NOT change **ORACLE NET name** and **Schema**.

UPDATING: When updating from earlier versions to version 3.4 and higher, running the *parentFolderConv-SQL.sql* database script from the Exchange Archive tab can take a longer time. It is not necessary to run the script immediately after update. It is recommended to unselect the above-mentioned script when executing scripts on the Exchange Archive tab, have the system up and running and execute that script on the Exchange Archive tab only later.

To configure the Archive Manager and Auditing databases:

1. On the database **Configuration** tool switch to the **Exchange Archive** section and then click **Configure**.

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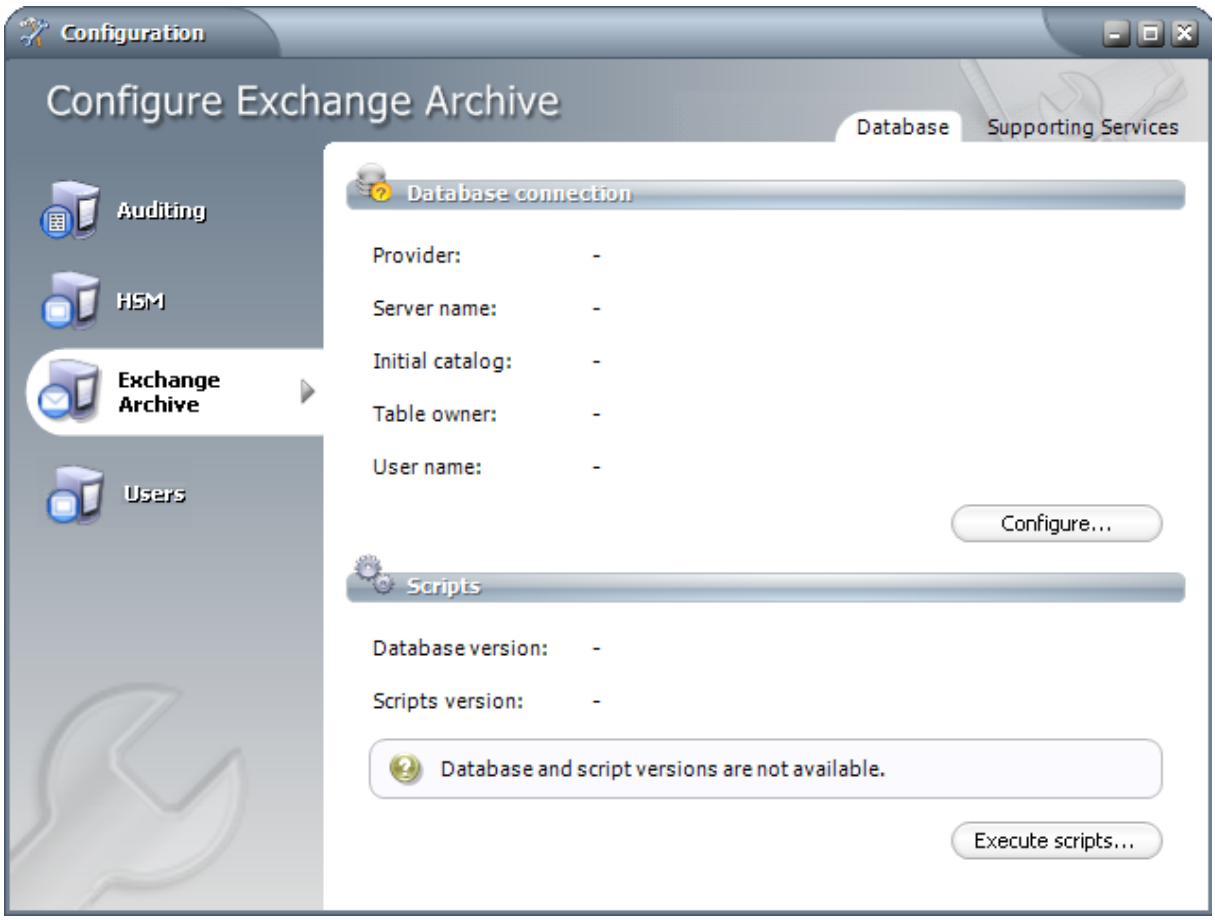

2. If you have an MS SQL server as a database provider, select the respective radio button and click **Next**. If you are using an Oracle database choose the other radio button and click **Next**.

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Database configuration
Database Connection Wizard
Welcome to the Database Connection Wizard!
The Database Connection Wizard will help you to set up your server. It allows you to specify the database provider and describe the database connection parameters.
Please select the database provider you want to use:
Microsoft SQL Server
Oracle
The following page will let you specify the database connection parameters.
< Back
Next >
Cancel

3. In the next window you have to fill in the text fields as follows:

   - If you have Microsoft SQL Server

Server name - name of the SQL server
Initial catalog - name of the Archive Manager database (e.g. *exchangeDB*).
Table owner - name of the SQL Login that is a Table Owner (or the name of the SQL Schema), e.g. *srv_exchange*
Authentication – authentication type used for the database
User name - database login user (the one you are using as a table owner – e.g. *srv_exchange*)
Password - password of the above database login

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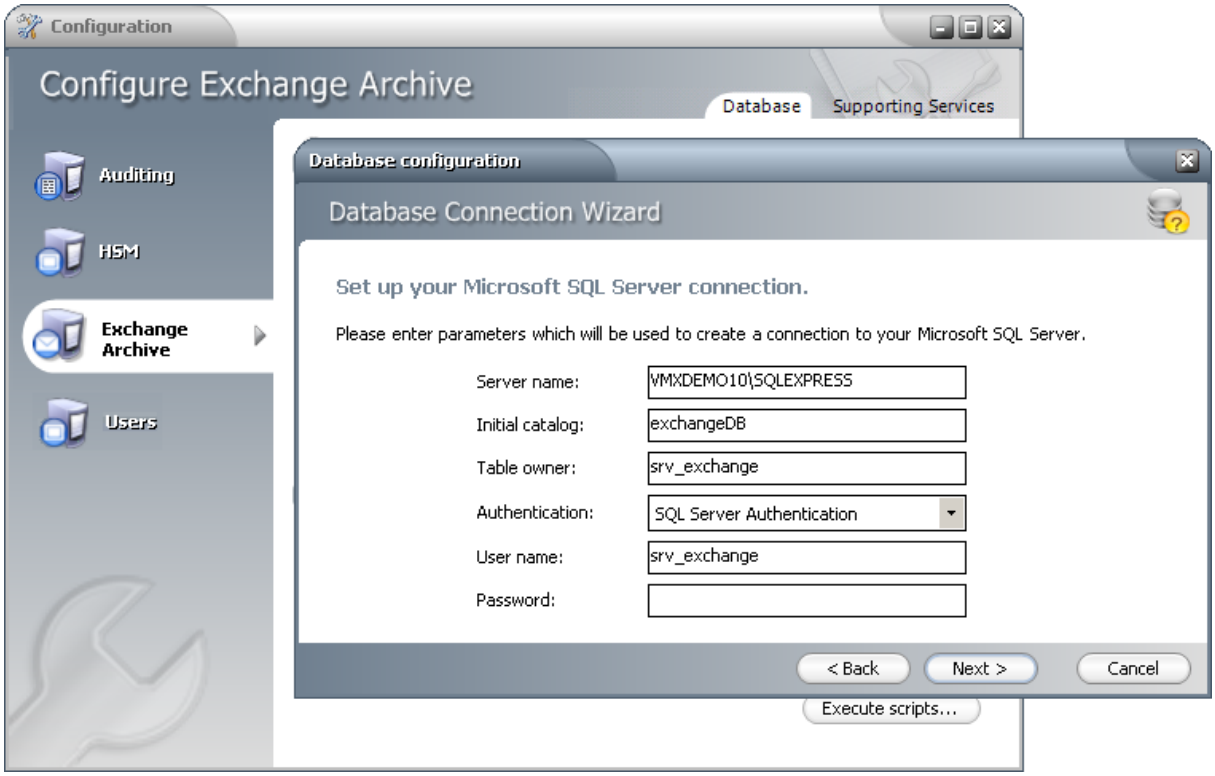

IMPORTANT NOTE: When updating Archive Manager from one version to another you **must NOT change the following values in the Configuration** tool on any of the tabs:

- **Server Name**
- **Initial Catalog**
- **Table Owner**

In case of an ORACLE database, do NOT change **ORACLE NET name** and **Schema**.

- If you have ORACLE

ORACLE NET Name - ORACLE NET name, TNS name
Schema - the name of the schema where Archive Manager tables will be created
User Name - log-on user for the HSM database (with read and write rights to the tables)
Password - log-on user's password

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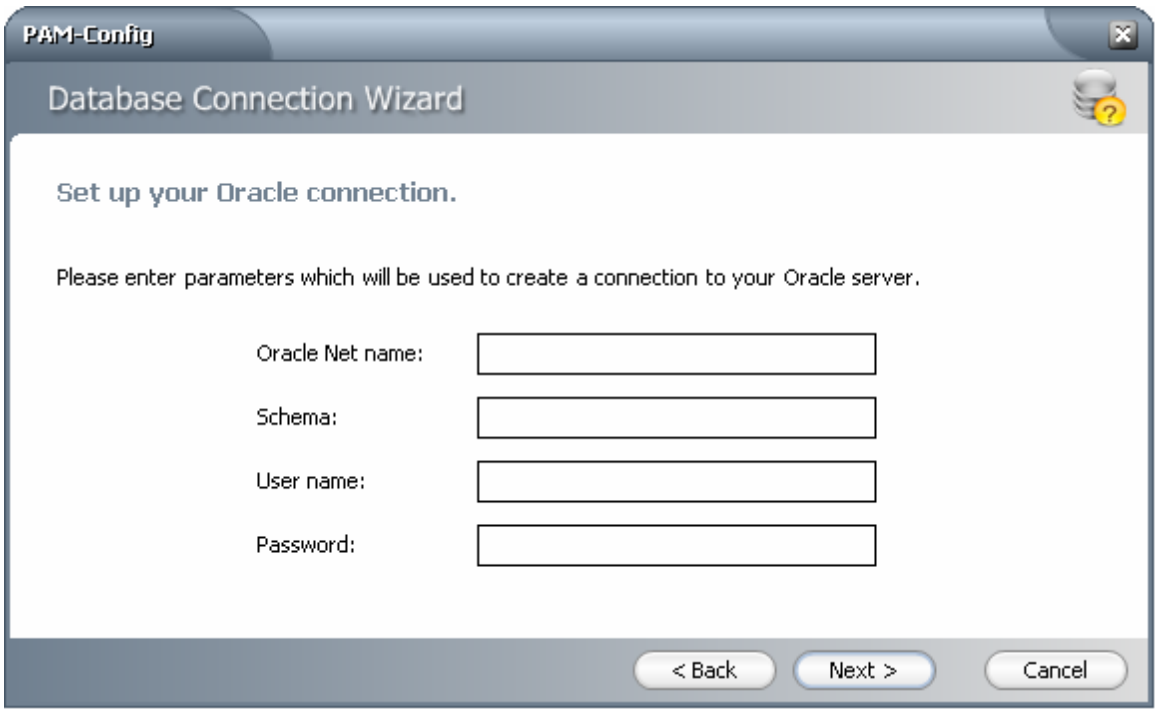

4. Back on the **Exchange Archive** tab run the sql scripts by clicking **Execute Scripts**. The list of the scripts will appear. Click **Next**.

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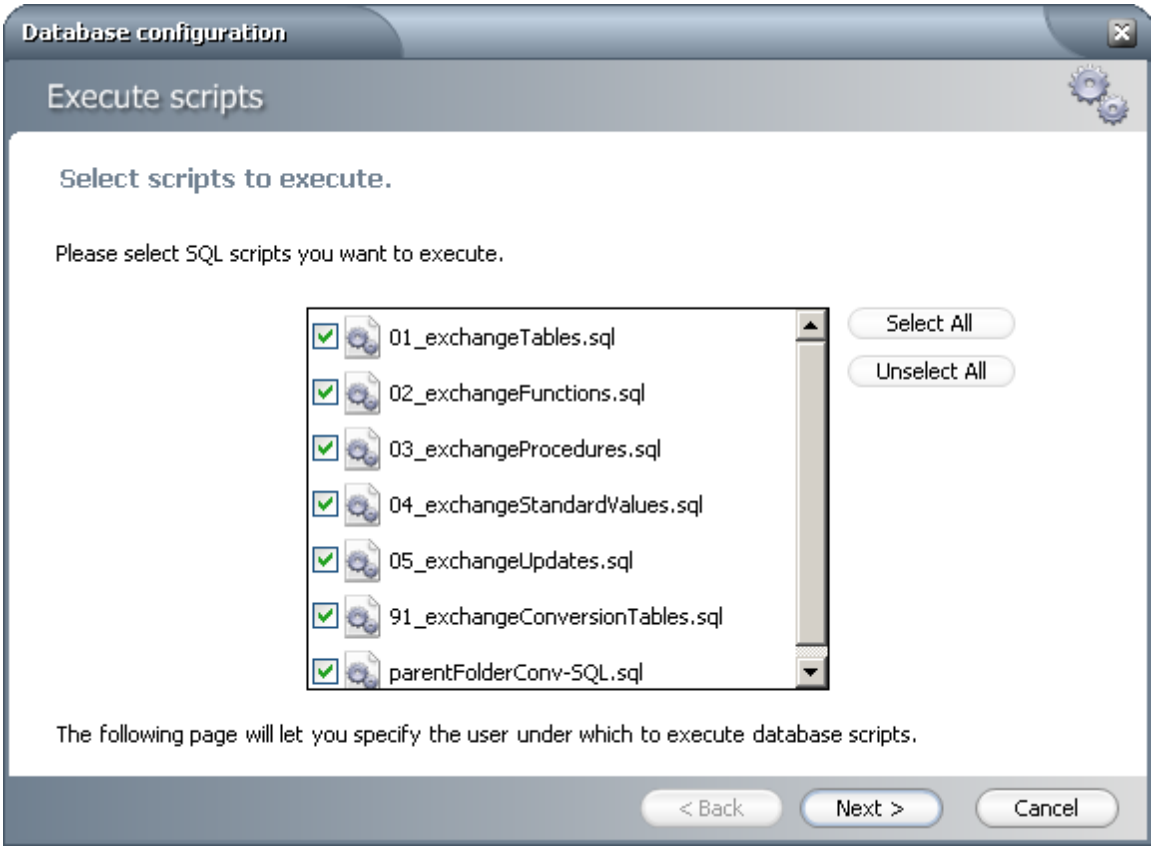

NOTE: When updating from earlier versions to version 3.4 and higher, running the *parentFolderConv-SQL.sql* database script (the last one) can take a longer time. It is not necessary to run the script immediately. It is recommended to unselect the above-mentioned script when executing scripts on the Exchange Archive tab, have the system up and running and execute that script on the Exchange Archive tab only later.

5. In case of SQL Authentication, click **Next** once more to accept the database login user and its password.

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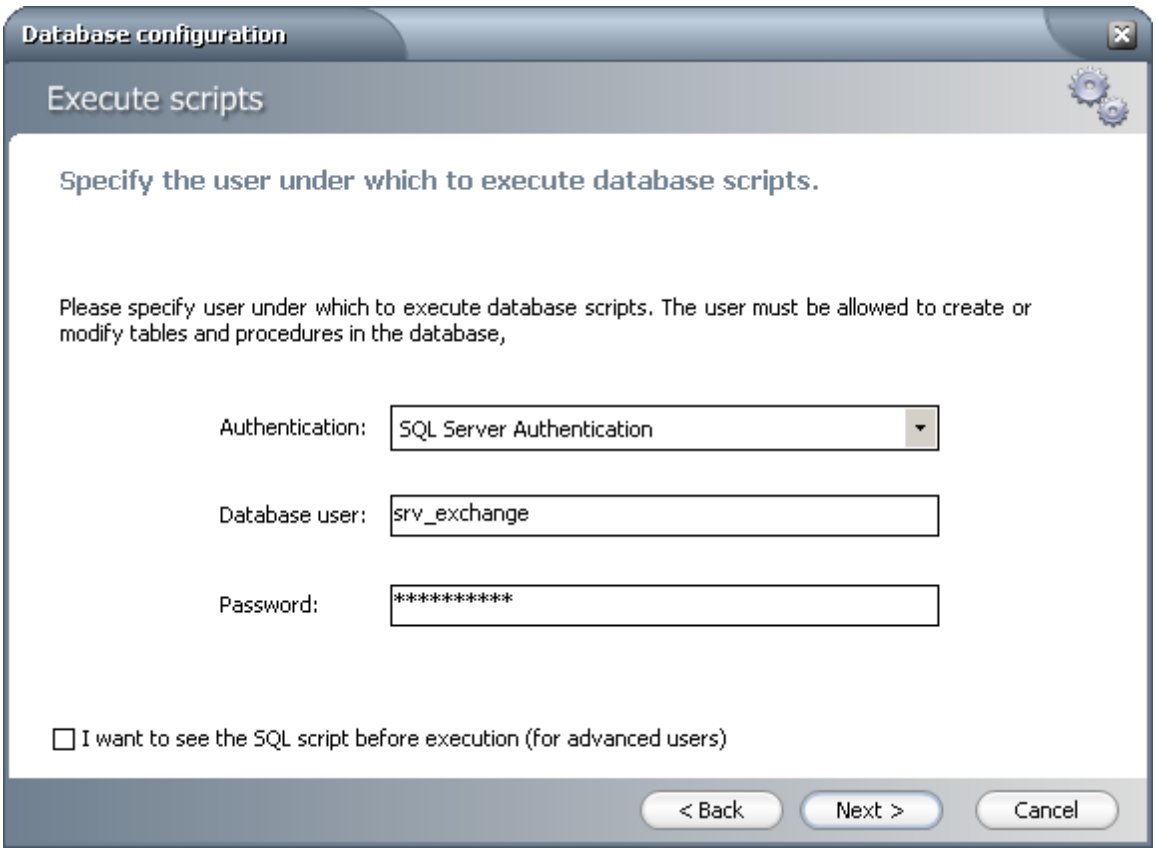
Database configuration
Execute scripts
Specify the user under which to execute database scripts.
Please specify user under which to execute database scripts. The user must be allowed to create or modify tables and procedures in the database,
Authentication:
SQL Server Authentication
Database user:
srv_exchange
Password:
****
I want to see the SQL script before execution (for advanced users)
< Back
Next >
Cancel

6. Click **Next** to execute the scripts.

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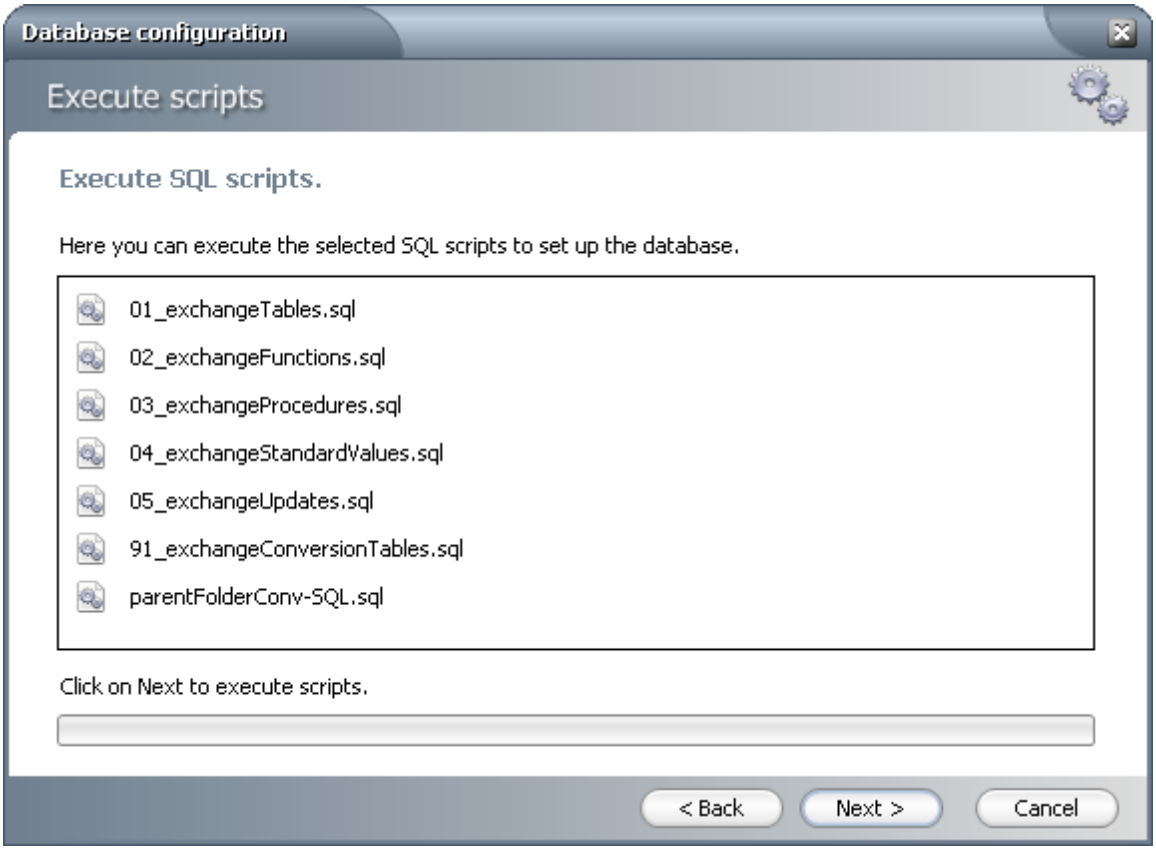

7. When the process finishes, click **Finish**.

8. Then switch to the **Exchange Archive/Supporting Services** tab. It lists two services running on the background ensuring smooth Archive Manager functionality. If Archive Manager itself is installed on the local machine, just click **Apply**. Otherwise specify machine name (instead of "localhost") and port for the computer where Archive Manager is installed.

9. Now switch to the **Users** tab. Configure it in the same way as the Exchange Archive part. Use either the dedicated database mtUserDB or the same database that was used for Exchange Archive part.

10. If you have installed Auditing feature, switch to the Auditing tab to configure the Auditing database. The process is similar to Archive Manager database configuration – configure the *auditingDB* and run the scripts.

    NOTE: Auditing log targets and configuration are described in detail in the "Auditing manual".

11. When you finished, close the database **Configuration** tool. Archive Manager database is now configured.

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Publishing Archive Manager Forms

As suggested back in the Postinstallation window, the second step will be *FormPublishing*. You need to publish the custom forms for Archive Manager in the Organizational Forms library **of each Exchange Server** you plan to archive.

These custom forms need to be installed with the **FormsInstaller.exe** tool. This tool is as default installed on the Archive Manager server under **C:\ Program Files (x86) \ Metalogix \ MAM4Exchange \ Tools \ Forms**. It can be used on any machine with Outlook 2016 (32bit) / 2013 (32bit) / 2010 (32bit) / 2007 and .NET Framework 2.0 SP2 or higher installed. You can run it on a client or on your Archive Manager server.

How to do it:

NOTE: To run the FormsInstaller on a client, use the **FormsInstaller setup**. It can be downloaded together with the Archive Manager setup. This smaller setup is used to install the **FormsInstaller.exe** tool and other necessary .dll files on the client machine.

1. Check that the super-user account is a local admin on the machine.
2. Log-on with the super-user account and open its profile in Outlook. Make sure you are not using cache mode while attempting to publish the custom forms.
3. When done, keep the Outlook still opened with the super-user account and run the forms install application from this location

   C:\ProgramFiles (x86)\Metalogix\MAM4Exchange\Tools\Forms\FormsInstaller.exe

4. The **Forms Installer** window opens. Select **Install/repair**. Then click **Next**.

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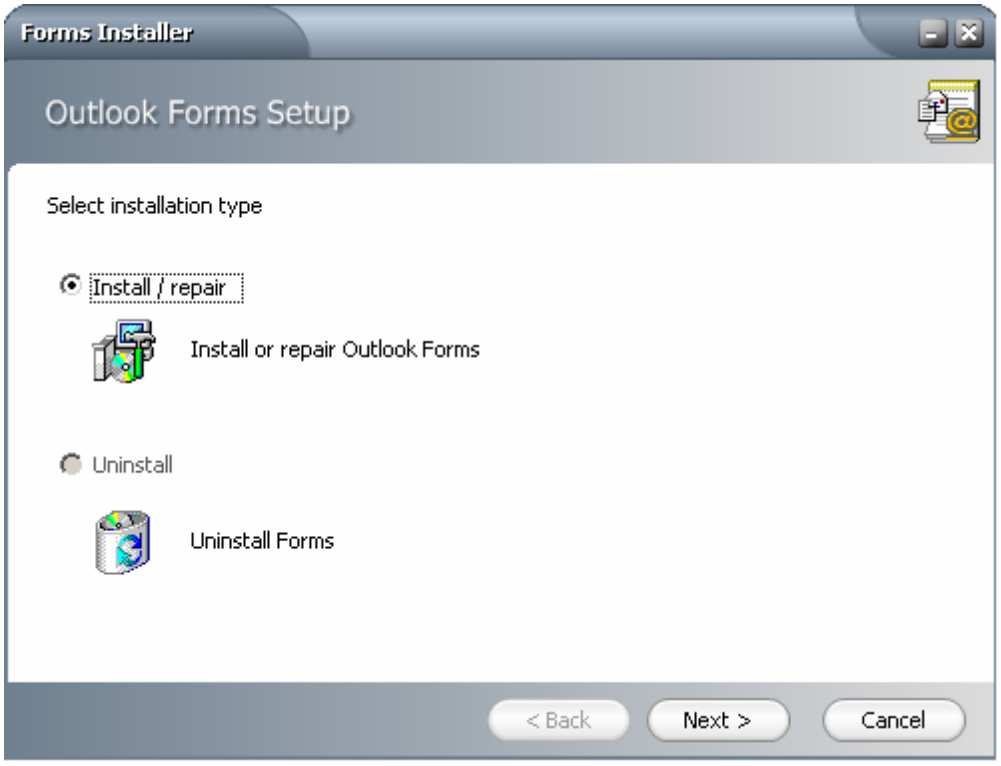

5. If you have installed the Forms folder on a location different from the one displayed, click the **Browse** button to find it. Otherwise click **Next**.

   NOTE: The Archive Manager form templates are located under the following path: **C:\ Program Files (x86) \ Metalogix \ MAM4Exchange \ Tools \ Forms \ Templates**.

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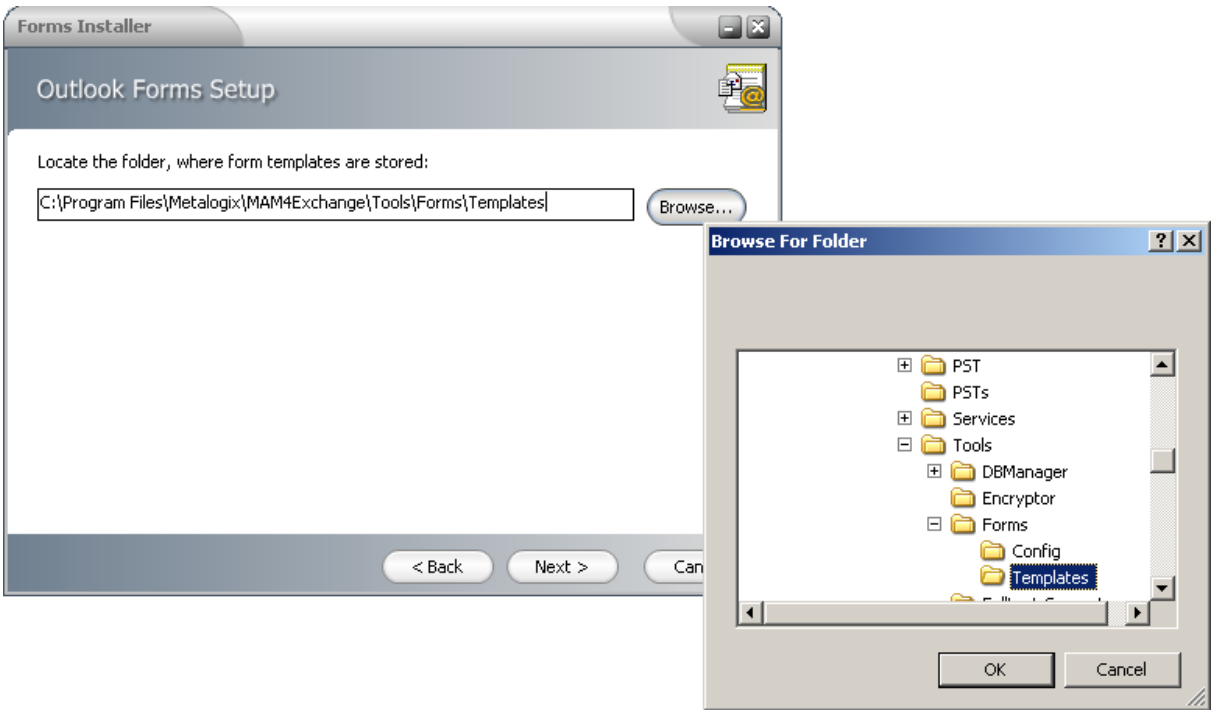
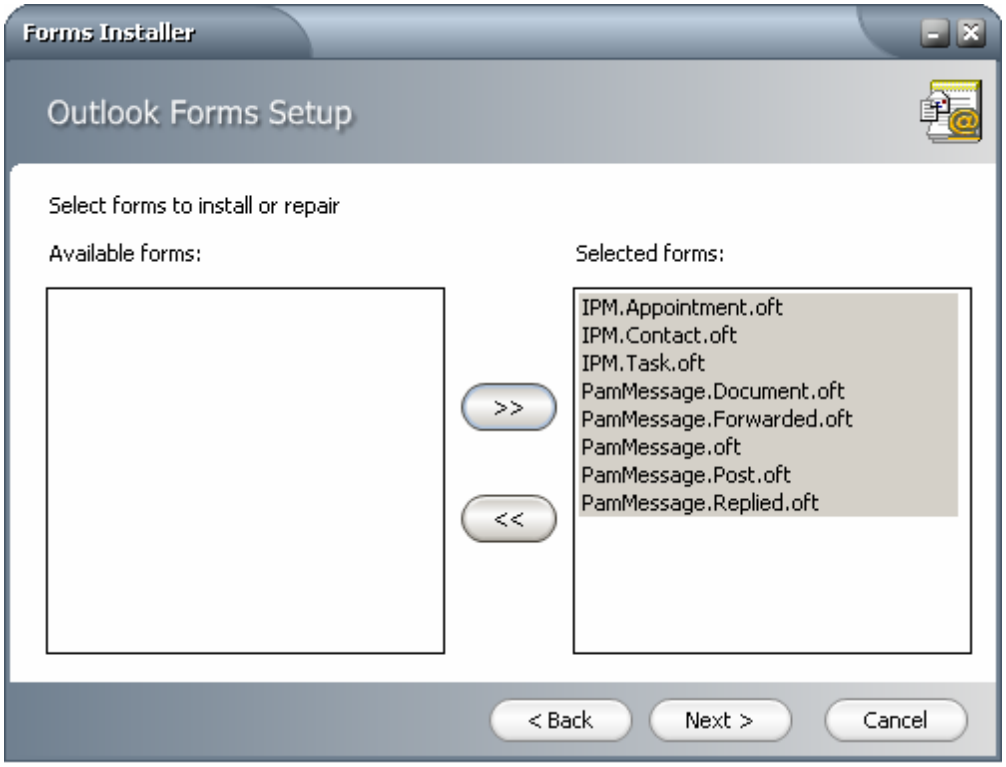


6. In the next window select the available forms and then click on the "**>>**" button to add them to the **Selected forms** list. Then click **Next**.



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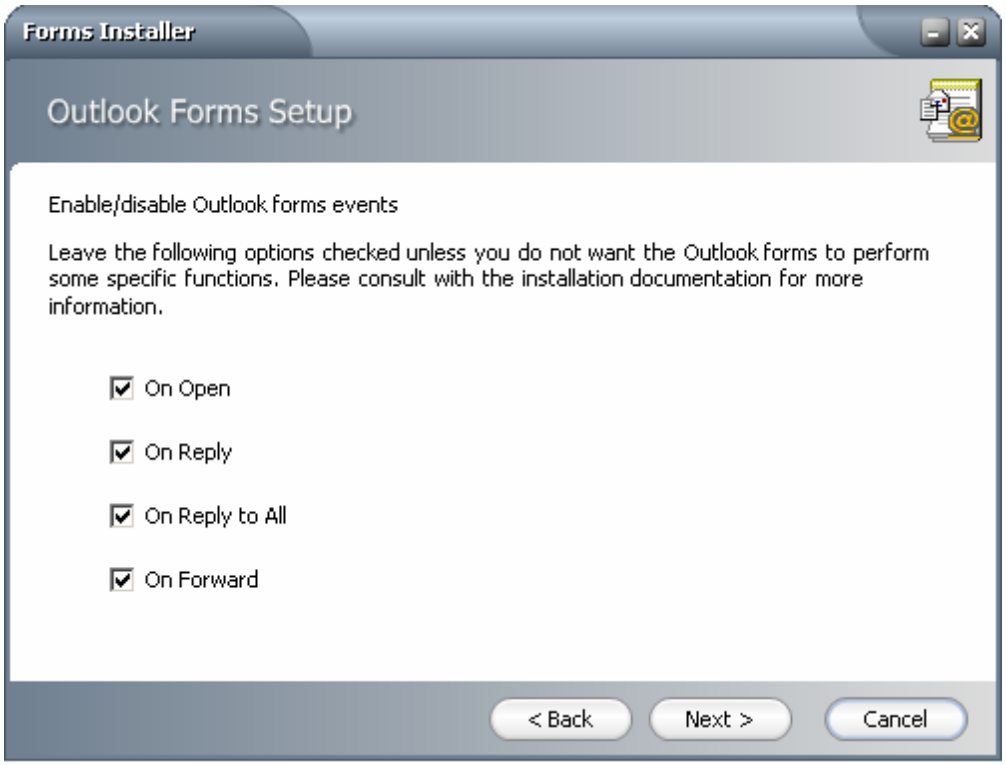
7. For full functionality leave all four options of this window checked and click **Next**.

   Uncheck the individual options only for special purposes:

   - When an archived email is opened in Outlook, the "Previous Item" and "Next Item" functionality is not working. This is because of the nature of archived email, which is just an offline copy of the original email. If you want to use the "Previous/Next" buttons while not retrieving the archived email, you can uncheck the "On Open" check box. In this case the archived email is not downloaded when the user double-clicks on the shortcut. Please note that in order to be able to access the archived mail, you have to set up another way of accessing its content, e.g. by setting up attachment links or html shortcuts. In this case there are direct links to the archived content directly from the shortcut, so the On Open method is replaced.

   - Should you want to send in a reply just the shortcut of the given email (when clicking Reply on the Outlook menu bar), unchecked the *On Reply* check box.
   - Should you want to send in a reply to all just the shortcut of the given email (when clicking Reply to all on the Outlook menu bar), unchecked the *On Reply to All* check box.

   - Should you want to forward just the shortcut of the given email (when clicking Forward on the Outlook menu bar), uncheck the *On Forward* check box.


Forms Installer
Outlook Forms Setup
Enable/disable Outlook forms events
Leave the following options checked unless you do not want the Outlook forms to perform some specific functions. Please consult with the installation documentation for more information.
On Open
On Reply
On Reply to All
On Forward
< Back
Next >
Cancel

8. On the next dialog you will have to provide the name of your **Archive Manager server** that will

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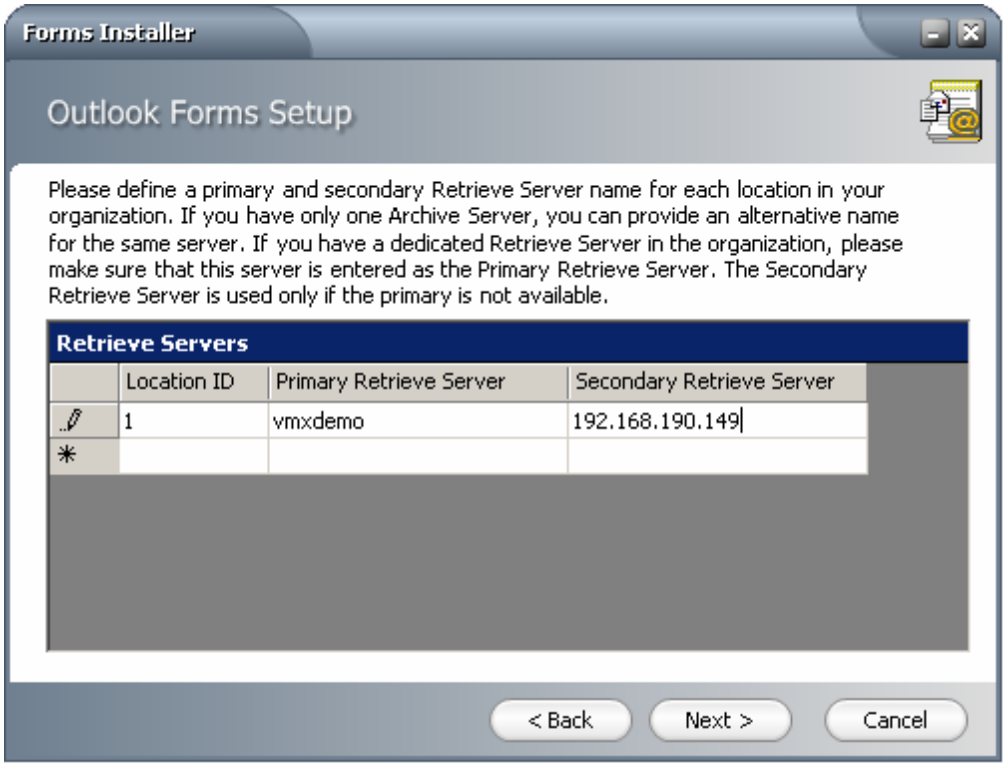
be used for retrieving of archived mails. This name will be written in the custom forms code. You can provide two values (for example the NETBios name of the Archive Manager server and its IP Address as well) in case one of them is not reachable, the forms will do an automatic switch.


Forms Installer
Outlook Forms Setup
Please define a primary and secondary Retrieve Server name for each location in your organization. If you have only one Archive Server, you can provide an alternative name for the same server. If you have a dedicated Retrieve Server in the organization, please make sure that this server is entered as the Primary Retrieve Server. The Secondary Retrieve Server is used only if the primary is not available.
Retrieve Servers
Location ID
Primary Retrieve Server
Secondary Retrieve Server
1
vmxdemo
192.168.190.149
< Back
Next >
Cancel

In the **Location ID** you have to write integers. Your first Archive Manager archiving server has the Location ID 1. If you will have later a second Archive Manager archiving server in the same domain you can set its Location ID to 2 etc. This will help the Forms to target to all the Archive Manager servers in the same domain. In other words, you have as many Location IDs as the number of your Archive Manager databases in use.

The **Primary Retrieve Server** column must contain the name of your Archive Manager server. If you use a dedicated server for retrieving, then you should write the name of this **Retrieving Archive Manager server** on this column.

The **Secondary Retrieve Server** column is usually keeping a different value than the one written on the previous column. That's because the forms can do a switch and try two values in case one is not accessible.

EXAMPLE:
- If you have only ONE Archive Manager server, always set on the **Primary Retrieve Server** column the NETBios name of your Archive Manager server and on the **Secondary Retrieve Server** the IP Address of the very same machine.

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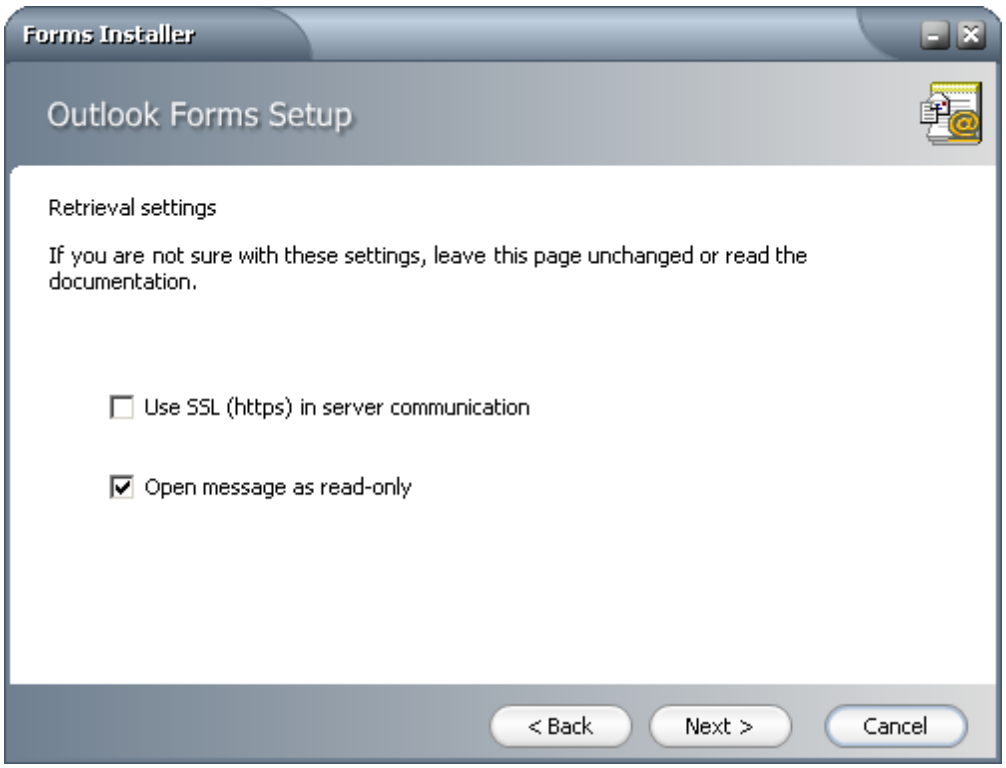
- If you have MORE Archive Manager Servers, i.e. you have a dedicated retrieve server for your Archive Manager, then on the **Primary Retrieve Server** column you have to provide the NETBios name of the Retrieving Archive Manager Server, while in the **Secondary Retrieve Server** column you have to provide the NETBios name of the Archiving Archive Manager Server.

9. Now define your retrieval settings. **Check the Use SSL (https) in server communication** check box if you use the "https" in your domain communication. The **Open message as read-only** check box is selected as default, so that archived emails would open as read-only for your users. Do not change these settings unless it is necessary. When this option is not checked, users are allowed to modify archived emails but these changes are not reflected in the archive. When finished, click **Next** and then **Install** to publish the custom forms

   NOTE: Users with **Archive Manager Outlook Addin** installed can modify archived emails by creating new email versions in archive even if the **Open message as read-only** check box is selected.


Forms Installer
Outlook Forms Setup
Retrieval settings
If you are not sure with these settings, leave this page unchanged or read the documentation.
Use SSL (https) in server communication
Open message as read-only
< Back
Next >
Cancel

10. After the attempt of publishing each of the eight forms you will get a result in the **Forms Installer** tool. If the result is **OK**, your installation of the forms is successful. You can check them

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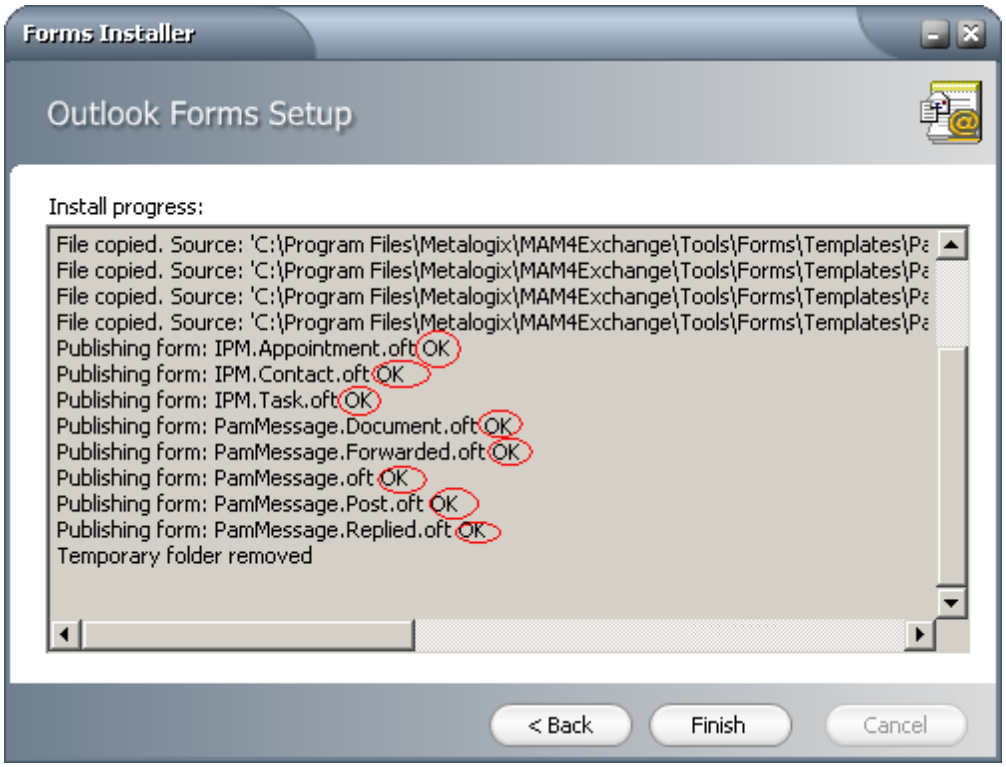
if you go in Outlook to **Tools / Form / Choose Form** and then list from the Organizational Forms Library.

When done, click **Finish** and your custom forms are now installed.



Activating mailboxes

After publishing the forms for the super-user (previous chapter), it is necessary to activate all mailboxes which you plan to archive. To do so:

- open Outlook with super-user account

- go to Tools/Forms/Choose form

NOTE: In Outlook 2013 click Home tab / New Items / More Items / Choose Form.

- in the new dialog list choose the Organizational Forms Library

- keep the SHIFT key pressed on your keyboard and double-click to load the form called PamMessage (there are 4 of them, use the 4th one – it is the one with an icon of archived message ; to display the icon click *Advanced*)

- it will open and look like a normal email

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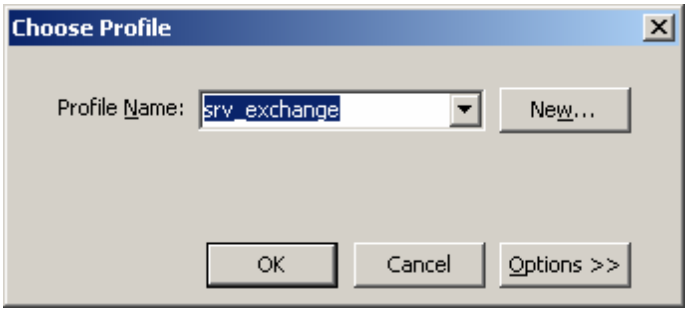
- send this email to all mailboxes you plan to archive

Now you have activated all mailboxes and they can be archive.

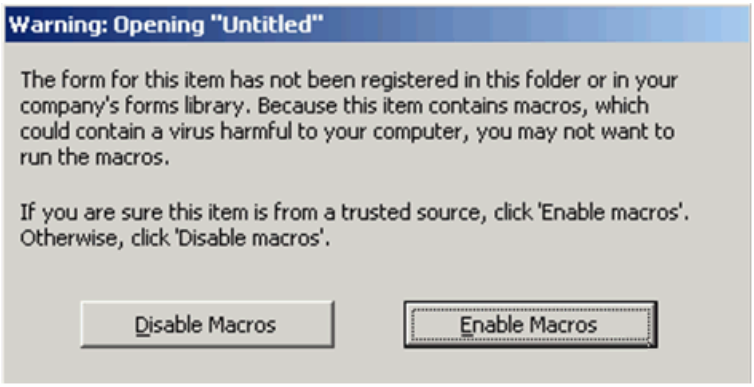
NOTE: If there are multiple languages (multiple organizational form libraries), then you need to publish the forms using a language specific Outlook and account – one for each language.

To replicate the Archive Manager forms in the Public Information Store, use the same method to send an Archive Manager form to your Inbox folder. Then copy it in the Public Folder you wish to archive from. The Archive Manager forms are replicated now in the Public Information Store too.

NOTE: If during the installation the **Choose Profile** window is displayed, select the appropriate profile from the **Profile Name** combo box. (The profiles are created in MS Outlook under a user with an e-mail account on the MS Exchange Server.)



NOTE: If during installation a **Warning** window concerning macros appears, then always click on the **Enable Macros** button.


Warning: Opening "Untitled"
The form for this item has not been registered in this folder or in your company's forms library. Because this item contains macros, which could contain a virus harmful to your computer, you may not want to run the macros.
If you are sure this item is from a trusted source, click 'Enable macros'. Otherwise, click 'Disable macros'.
Disable Macros
Enable Macros

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Start Archive Manager services

You are now ready to proceed to the next post installation task – starting the Archive Manager services on your archiving server:

- Click the relevant **Start** button in the **Postinstallation** window or
- You can also start services when running the batch file from **<installdir>** \ **Metalogix \ MAM4Exchange** \ **Tools** \ **Start.bat**

NOTE: Maybe in the future you will have to restart the Archive Manager services to load some special settings for your email archiving. In that case use always the batch tools - **Stop.bat** and **Start.bat** - located in the same directory **<installdir> \ Metalogix \ MAM4Exchange \ Tools**.

Enterprise Manager – Initial Configuration

Once the Archive Manager services are all started you can proceed with opening the main archiving tool of Archive Manager called **Enterprise Manager** where you will have to populate the Archive Manager with users - in other words, synchronize your users whose emails you wish to archive. Additionally, the Initial Configuration wizard will lead you through all settings necessary for archiving.

To open the **Enterprise Manager:**

- click the last **Start** button in the **Postinstallation** window or
- launch it from **Start / Programs** / **Metalogix** / **Archive Manager Exchange Edition / Enterprise Manager.**

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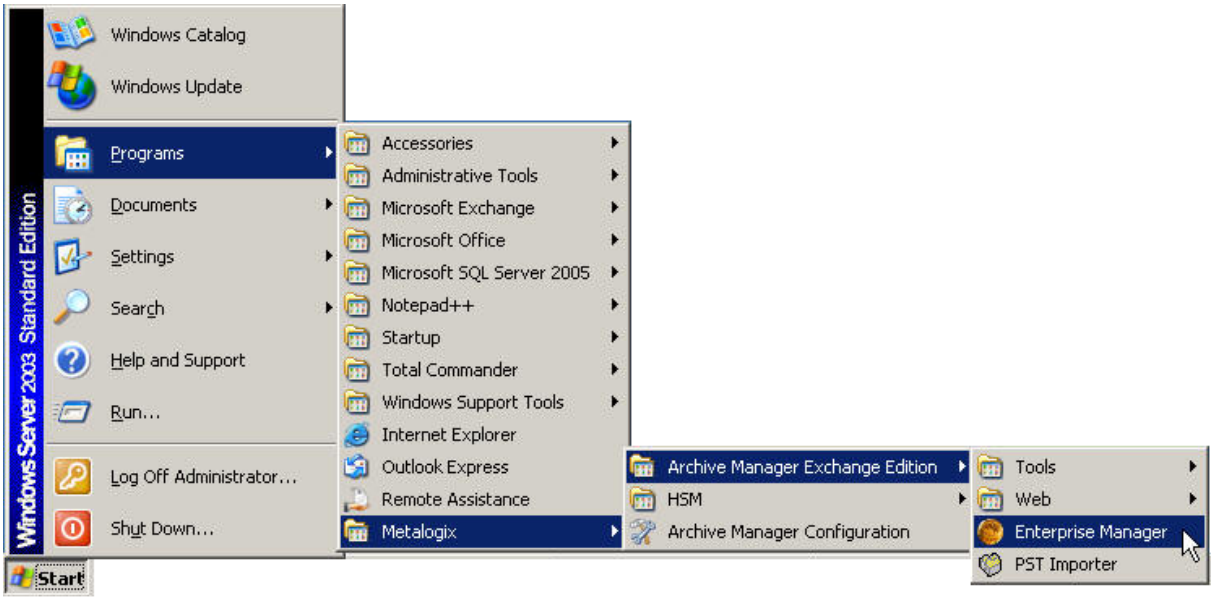

NOTE: As default, only the super-user, which was specified during the Archive Manager installation, has logon permissions to the Enterprise Manager (EM). Thus when you want to run the EM, you have to be logged on with the super-user account. However, you can grant other users logon permissions as well. It can be done on the **Tools** / **Options** / **User roles** tab in EM (for more information see the "*Administrator manual for Archive Manager Exchange Edition Enterprise Manager*").

When the EM is launched for the first time, no users are synchronized with Archive Manager, no archiving is scheduled. To facilitate the initial configuration tasks, the **Initial Configuration wizard** is started. It will lead you through the initial configuration so that you can start archiving with Archive Manager. The wizard will perform the following tasks:

1. Import mailboxes or group which you want to archive with Archive Manager
2. Set the default retention category
3. Define job, i.e. scheduled task which will perform the archiving
4. Configure group and email filtering

After you finish the initial configuration as described further, you will not need to run the wizard again. All additional settings can be configured directly in EM. Check the **Do not show this wizard when the application starts** check box so that this wizard will not start next time when you run the EM.

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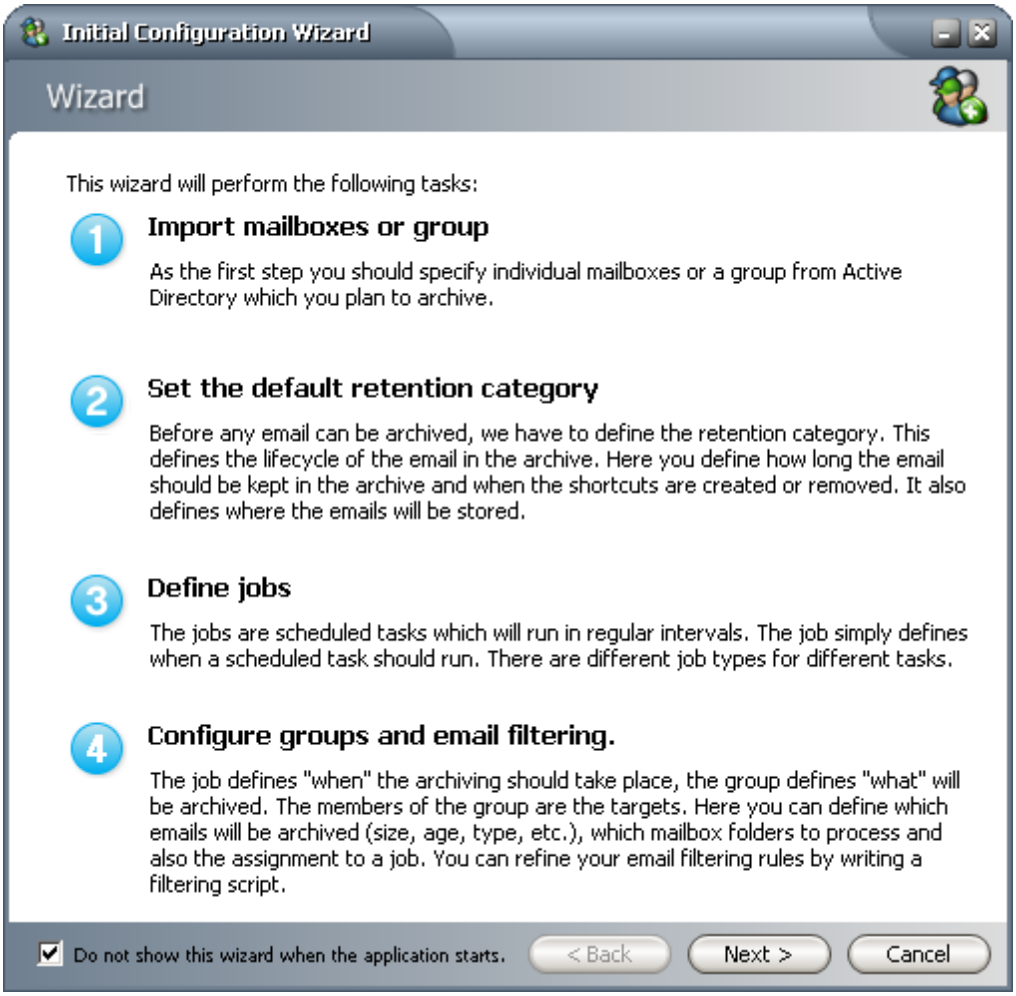
Initial Configuration Wizard
Wizard
This wizard will perform the following tasks:
1
Import mailboxes or group
As the first step you should specify individual mailboxes or a group from Active Directory which you plan to archive.
2
Set the default retention category
Before any email can be archived, we have to define the retention category. This defines the lifecycle of the email in the archive. Here you define how long the email should be kept in the archive and when the shortcuts are created or removed. It also defines where the emails will be stored.
3
Define jobs
The jobs are scheduled tasks which will run in regular intervals. The job simply defines when a scheduled task should run. There are different job types for different tasks.
4
Configure groups and email filtering.
The job defines "when" the archiving should take place, the group defines "what" will be archived. The members of the group are the targets. Here you can define which emails will be archived (size, age, type, etc.), which mailbox folders to process and also the assignment to a job. You can refine your email filtering rules by writing a filtering script.
Do not show this wizard when the application starts.
< Back
Next >
Cancel

On the initial page of the wizard click **Next**. On the next page you can choose between different ways of importing users to Archive Manager:

a) **Create group and import users** – a user defined group (not an Active Directory group) will be created in the Archive Manager and you will be able to choose which users from Active Directory should belong to this group

b) **Create group by LDAP query** – you will create a group in Archive Manager containing the users/groups satisfying the defined LDAP query

c) **Select an Active Directory group** – you will select an existing group from Active Directory and all its users will be imported

d) **Select a group in Azure Active Directory** – you will connect to your Office 365 and import selected groups/users (for more information see the "*Office 365 Configuration Details*" part)

NOTE: With the evaluation license you can import only 5 mailboxes.

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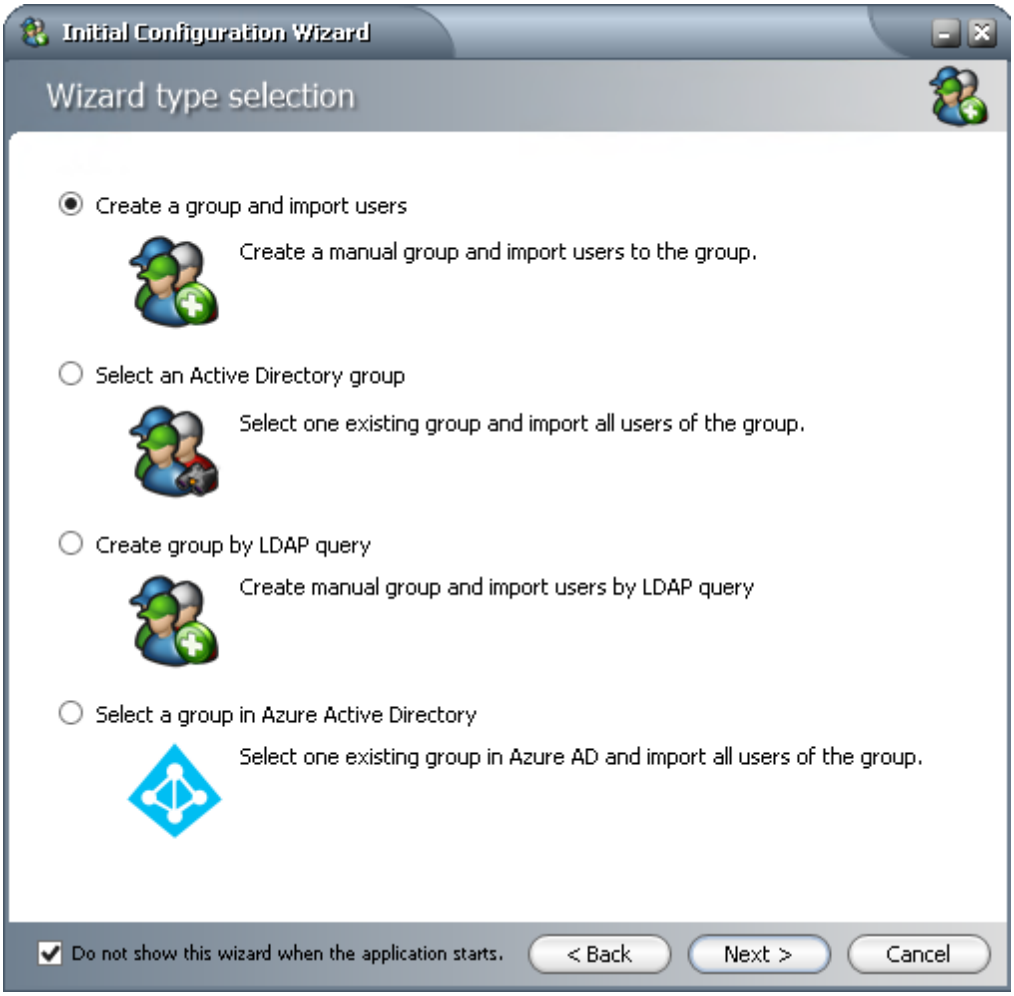
Initial Configuration Wizard
Wizard type selection
Create a group and import users
Create a manual group and import users to the group.
Select an Active Directory group
Select one existing group and import all users of the group.
Create group by LDAP query
Create manual group and import users by LDAP query
Select a group in Azure Active Directory
Select one existing group in Azure AD and import all users of the group.
Do not show this wizard when the application starts.
< Back
Next >
Cancel

Depending on the option you have chosen in the previous dialog, now you can:

a) Set the name of the group which will be created in the Archive Manager and select the mailboxes which you want to import to this group

NOTE: Right-click inside the list view to unfold the context menu. The context menu can be used to check / uncheck all mailboxes etc.

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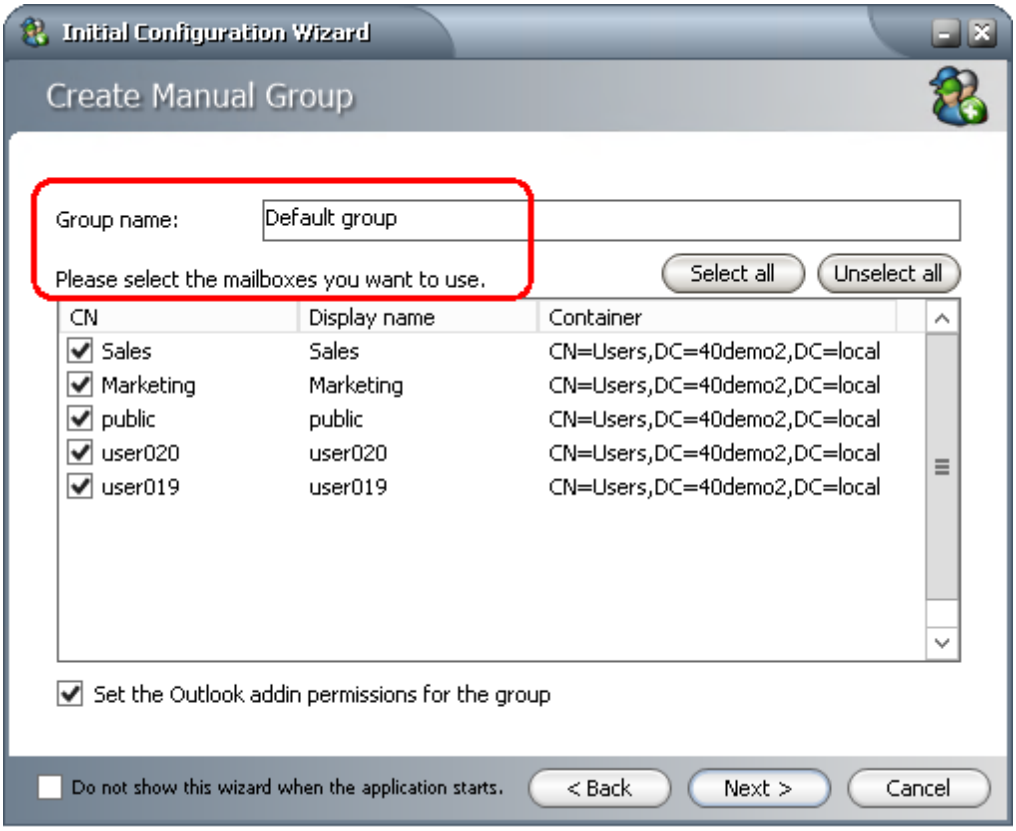

Further, should you wish to allow members of this group to use the Outlook addin for archiving directly from Outlook check the **Set the Outlook addin permissions for the group** option.

b) Select the Active Directory group which you want to import to the Archive Manager

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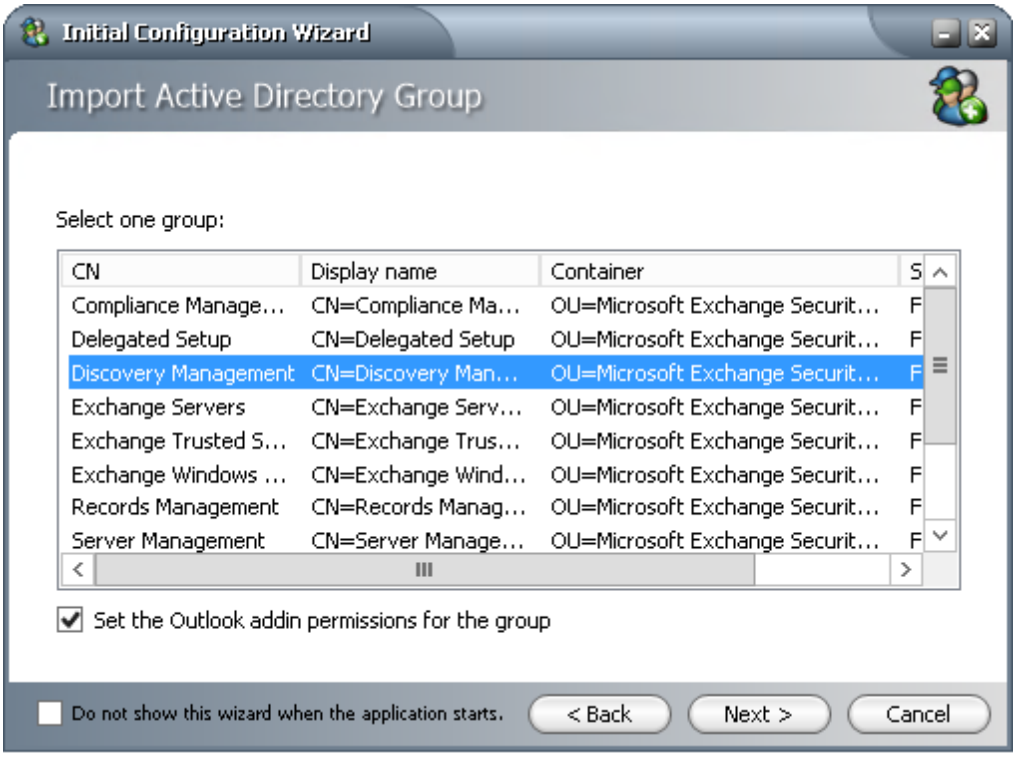

Further, should you wish to allow members of this group to use the Outlook addin for archiving directly from Outlook check the **Set the Outlook addin permissions for the group** option.

c) Set the name of the group which will be created in Archive Manager and specify LDAP query criteria for users to be imported:

Root of Search – use the **Browse** button to choose the root level for query search
Query String – here define your LDAP query
Query Scope – select if the query should be executed just on the root level (One level Search) or also on subtree starting from the root level (Subtree search)
After defining your criteria click **Next**. The following dialog displays users satisfying the criteria. Then click **Next**.

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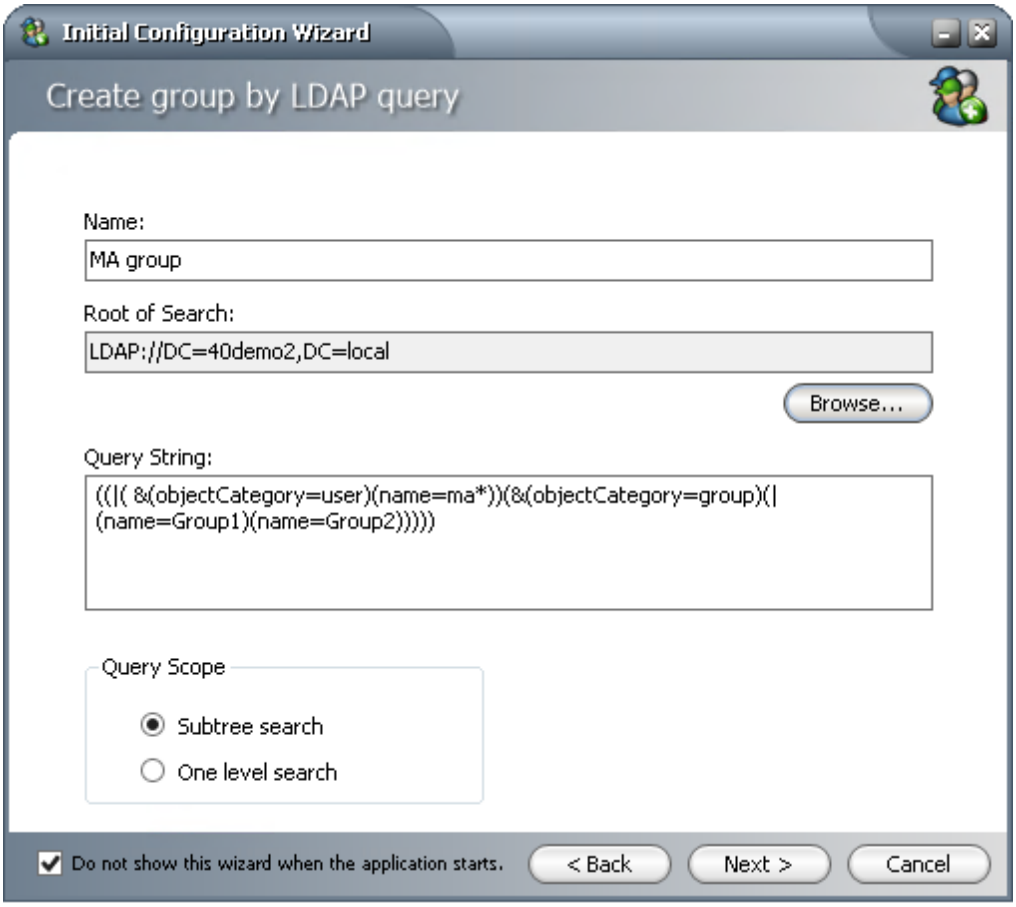

d) Enter your Office 365 credentials to import from Azure AD

NOTE: In case of Advanced Authentication for Azure AD, entering username and password is required (for more information see the "*Office 365 Configuration Details*" section).

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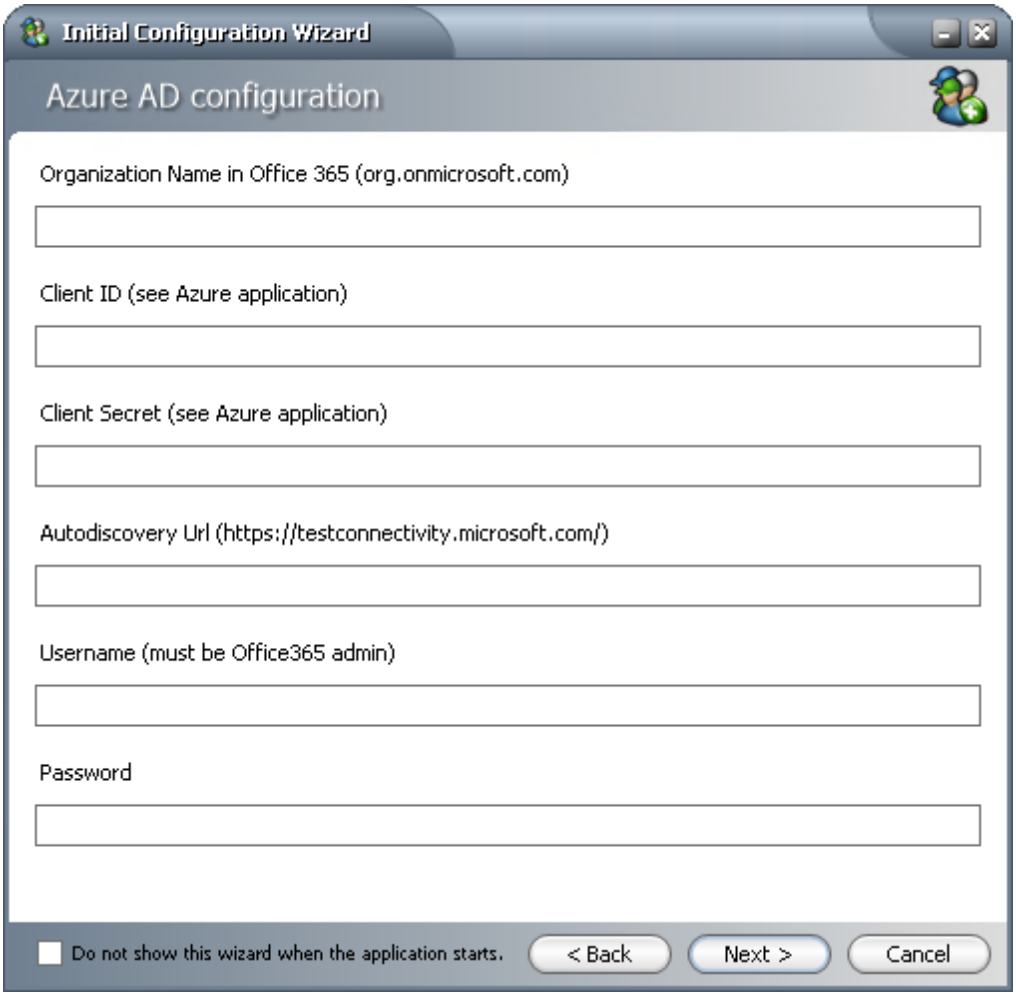
Initial Configuration Wizard
Azure AD configuration
Organization Name in Office 365 (org.onmicrosoft.com)
Client ID (see Azure application)
Client Secret (see Azure application)
Autodiscovery Url (https://testconnectivity.microsoft.com/)
Username (must be Office365 admin)
Password
Do not show this wizard when the application starts.
< Back
Next >
Cancel

In the next dialog select the Azure AD group which you want to import to Archive Manager.

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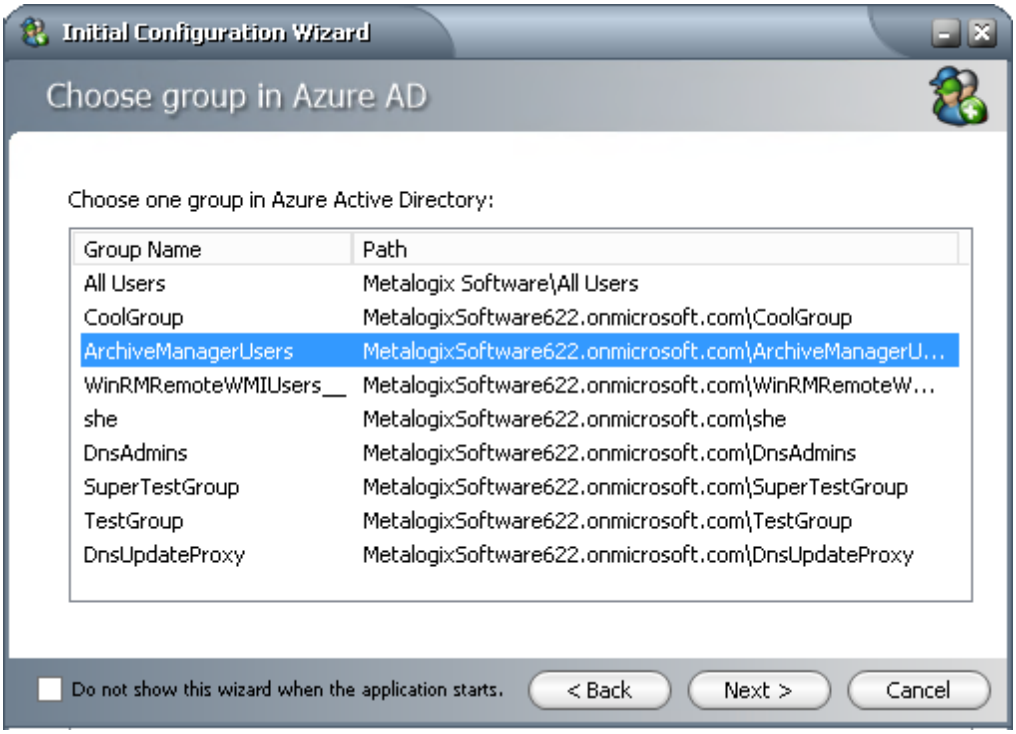

Further dialogs are the same for all scenarios:

In the **Archive Settings** dialog you can select the retention category which will be used as the default retention category. Retention category defines the lifecycle of the archived emails, i.e. it defines for how long the item will be kept in the archive etc. In the case of fresh installation, there is just one retention category ("Default" retention category) created by the wizard.

If you want to create a new retention category with specific settings click the "*create a new retention category*" link. Then in the pop-up dialogues you can create retention category with specific settings (for detailed information see "Retention tab" section in the "Administrator Manual for Archive Manager Exchange Edition Enterprise Manager").

In the **Email filtering** section define settings for email archiving. In the **Archive files older than ... days** text box enter the period following which the items will be archived. In the **Archive files bigger than** text box enter the size of the messages to be archived. Do not forget to select the appropriate units (B, KB or MB) in the down-drop box. Click **Next**.

Example: As the default the settings are the following:

10 days

0.01 MB

It means that messages older than 10 days AND bigger than 0.01 MB will be archived.

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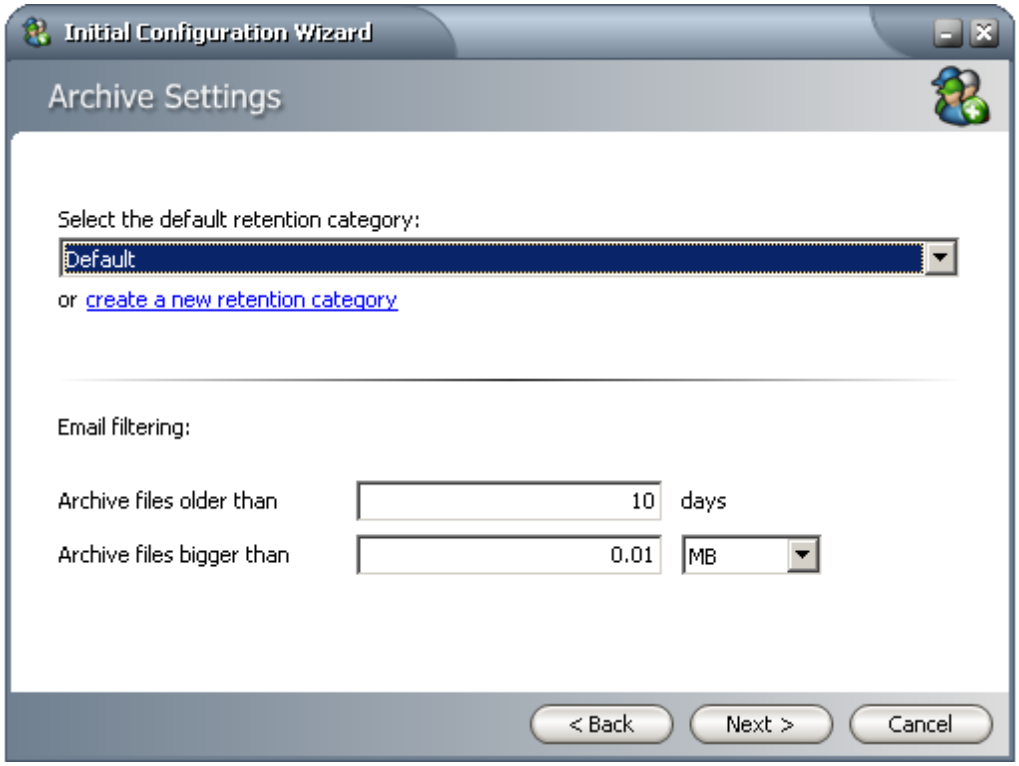

In the **Job Settings** dialog you will define job, i.e. scheduled task that will perform the archiving of messages for the given group. You can either **Select an existing job** or **Create a new job**. In the case of fresh installation there are no jobs yet. You have to create one by selecting the **Create a new job** option. In the **Job name** text box enter the name for the job. Then define the **Schedule interval**, i.e. the interval after which the job is restarted. If the **Start the job automatically** is checked, the job starts archiving automatically when the configuration finishes. If it is not checked, you will have to start the job manually.

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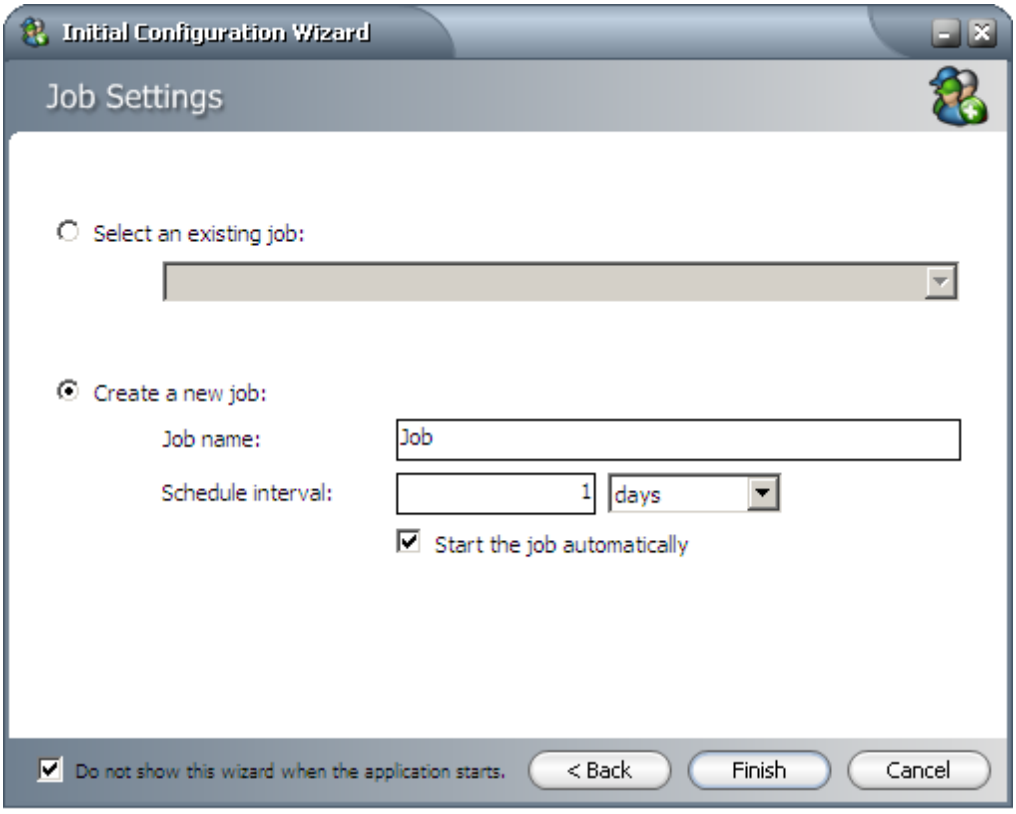

Finally click **Finish**. In the final report dialog you can read the summary. To conclude click **Close**.

NOTE: Check the **Do not show this wizard the next time** check box so that the wizard is not started every time you open Enterprise Manager. However, you can open it again anytime from **Help / Setup wizard** in the Enterprise Manager.

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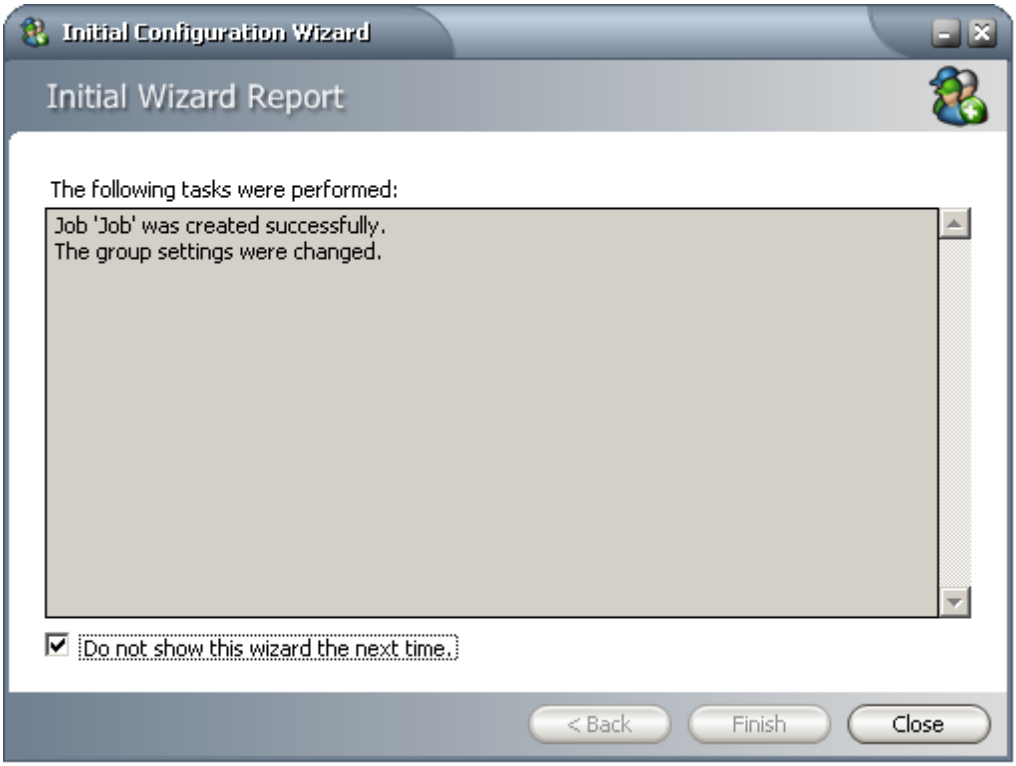

NOTE: For created groups make sure to check **Automatically import group members** and **Automatically import mailbox members** on group **Properties/Advanced** tab. This will ensure that new members satisfying your criteria will be automatically imported to Archive Manager at synchronization.

Conclusion

The following tasks were performed:

- imported a group of users to Archive Manager
- created retention category for archiving
- created job and assigned it to the imported group

From this moment on, Archive Manager job will archive messages of the given users based on the defined criteria. The group with all its settings will be displayed on the **Groups** tab of the **Enterprise Manager**.

NOTE: The process of importing users, groups or servers to Archive Manager is described in detail in "Administrator manual for Archive Manager Exchange Edition Enterprise Manager". Explanation of retention categories, jobs and other archiving settings can be found in the same document.

As mentioned at the end of the installation section you must assign a server role to your Archive Manager server depending on your LAN architecture. Go to **Enterprise Manager** / **Tools** / **Options** /

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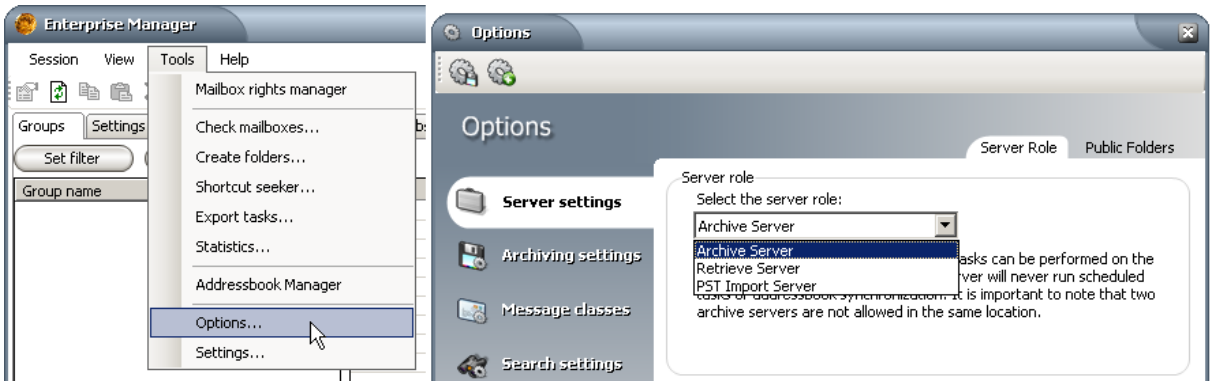
Server settings / Server roles tab. In the **Server role** down-drop box choose from the following server roles:

- Archive server
- Retrieve server
- PST Import server

In case of only one Archive Manager server in your environment, assign the *Archive server* role to it.

In case of more Archive Manager servers remember that in one Location there can be ONE Archive server, several Retrieve servers and PST Import servers. Any other Archive server must have a unique LocationID.

For more information see the section “Installing Archive Manager Exchange Edition”.



Exchange Server Tools Installation

To synchronize Exchange permissions with Archive Manager, Archive Manager Server Tools has to be installed on the Exchange server with Mailbox Role.

NOTE: Mixed environment (Exchange 2007 mixed with Exchange 2010) – install Extension on Exchange 2010 server with Mailbox Role

Technical requirements

Exchange 2010
• Windows Server 2008 (64-bit) / 2012 • .NET Framework 3.5 SP1 • IIS • MS Exchange 2010 (Mailbox role)

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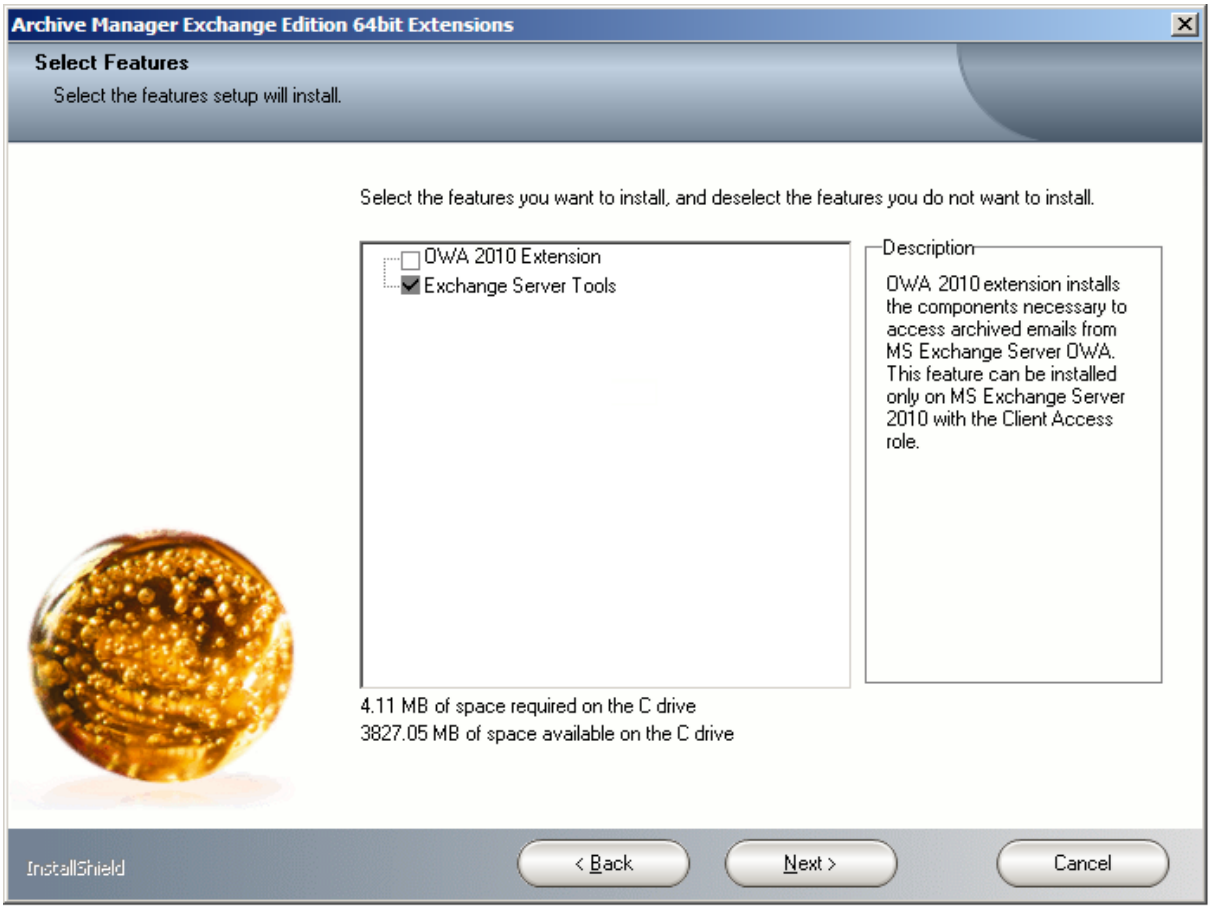
1. Download the **Archive Manager Exchange Edition_64bit_Extensions** setup.
2. Run it on the **Exchange 2010 Server** with the **Mailbox** role.
3. When asked to specify a user, enter the super-user credentials (DOMAIN\UserName and password). Super-user is the user under which Archive Manager is running. It was specified during the installation of Archive Manager.
4. The install folder is by default set to **C:\ Program Files \ Metalogix**.

   NOTE: It is a 64 bit application, so the 64 bit Program Files folder is selected as default. In case of custom folder, the full path will always be Metalogix\MAM4Exchange.
5. Select the **Exchange Server Tools** option. Click **Next**. Click **Install**, then **Finish**.


Archive Manager Exchange Edition 64bit Extensions
Select Features
Select the features setup will install.
Select the features you want to install, and deselect the features you do not want to install.
OWA 2010 Extension
Exchange Server Tools
Description
OWA 2010 extension installs the components necessary to access archived emails from MS Exchange Server OWA. This feature can be installed only on MS Exchange Server 2010 with the Client Access role.
4.11 MB of space required on the C drive
3827.05 MB of space available on the C drive
InstallShield
< Back
Next >
Cancel

6. As a last step, you need to configure the permission synchronization server. To do so on Archive Manager server launch the **Enterprise Manager**. Go to **Tools** / **Addressbook Manager** / **General** tab. Under *Automatic permission synchronization parameters* click **Settings**. In the pop-up dialog enter the name of the Exchange server on which you have just installed

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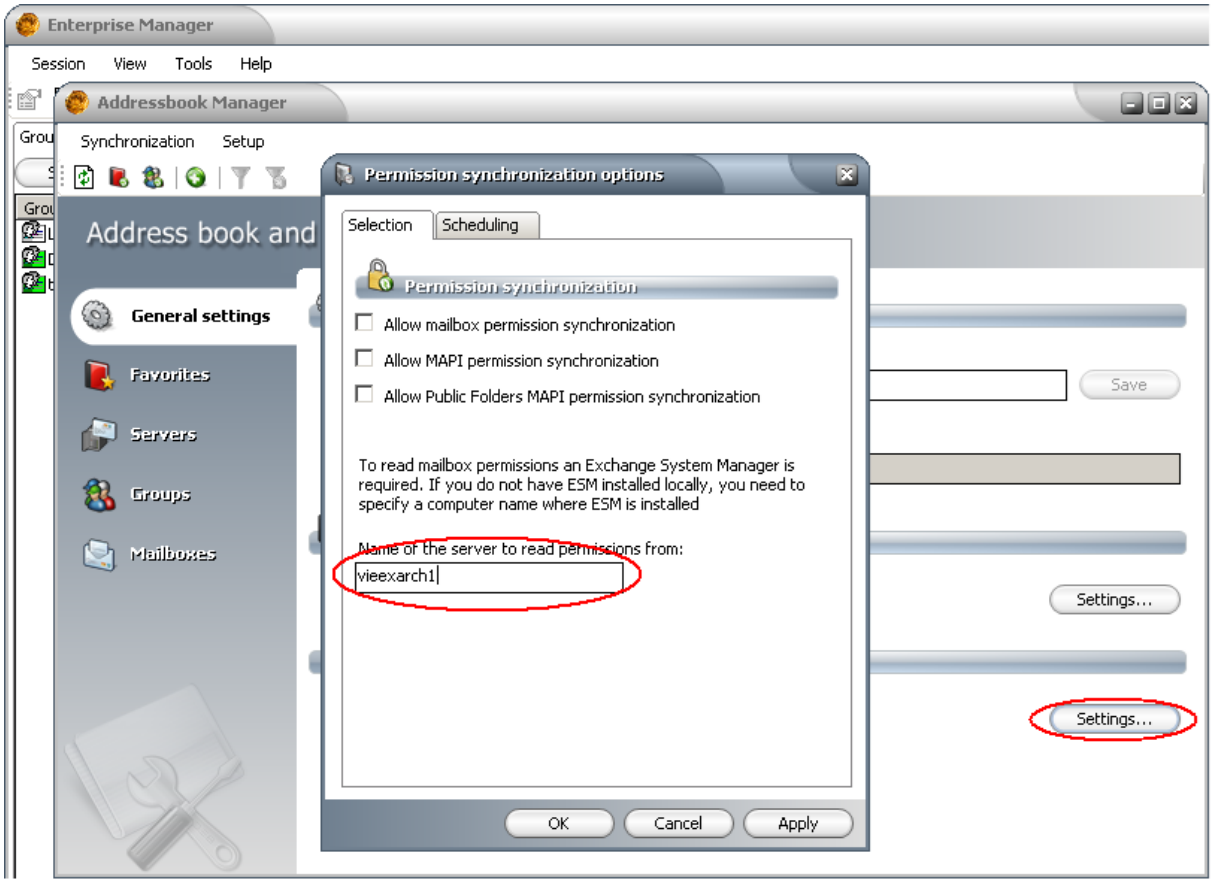
the Archive Manager Extension.



Testing after installation

When all post-installation tasks are completed, it is important to check if you are able to archive emails. This will prove that your installation was completed successfully. To do a fast check:

1. Open the **Enterprise Manager** tool in its **Archive** view (you can switch to this view by clicking the **View** menu on the toolbar).
2. In the **Look for** text field type the name of one of your synchronized mailboxes and click Enter.
3. After expanding the mailbox structure you will be able to see the list of emails in the right-pane of the tool.
4. Simply right-click one email and choose **Archive File** from the context menu.
5. If the archiving process ends with the following dialog you have successfully managed to archive your first email.

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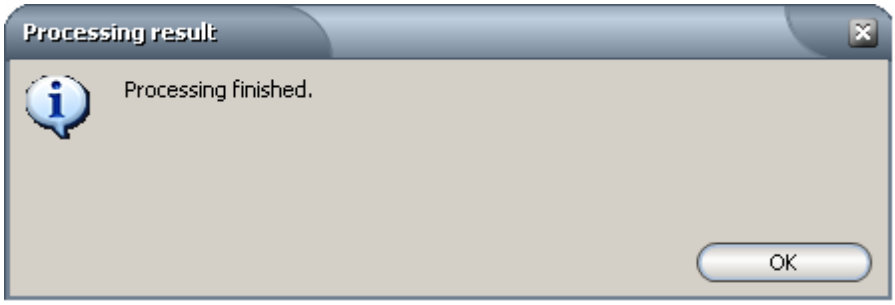

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Addendum

- Installation check list 109
- Office 365 Configuration Details 110
- Creating an MS SQL database 119

Installation check list

Use the list below to write down all information which you will need during the installation and configuration of Archive Manager Exchange Edition. It also summarizes all prerequisites for individual server.

- MS Exchange Server name:
  - ✓ Create and mount Public Folder database
  - ✓ Create Organizational Forms Library
- Mailbox for the super-user:

  The super-user must be given these permissions:
  - ✓ local administrator on your Archive Manager server
  - ✓ rights over LDAP Configuration container – with ADSI edit tool
  - ✓ Owner rights over Organizational Forms Library
  - ✓ View-Only Organization Management role on your Exchange Server
  - ✓ Public Folder Management role on your Exchange Server
  - ✓ Permissions on your Exchange Server to mailboxes which will be archived
  - ✓ Only if OWA will be used: Impersonation permission on your Exchange Server
- Database
  - MS SQL Database 2008 and higher

    SQL Server name:_____

    Initial Catalogue (DB-Name):_____
  - ORACLE Database 11g and 12c

    Net8 Connection Name:_____

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- In both cases:
  Schema: _____

  Database user: _____

  Password (do not reveal, do not fill in here!):_____

- HSM Server:
  - HSM Server (NETBios) Name: _____
  - HSM Schema name:_____
  - HSM Store name:_____
- Archive Manager Server;
  - ✓ Operating system – MS Windows Server 2008 R2 SP1 / 2012
  - ✓ IIS 6.0 or higher installed
  - ✓ .NET Framework 3.5 and 4.5 installed
  - ✓ Web Service Extension ASP.NET v2.0 and 4.0 allowed
  - ✓ MSXML (IE 7.0)
  - ✓ If ORACLE database is used you need to install the ORACLE Data Provider for .NET, in order to establish a Net8 connection.
  - ✓ Outlook 2016 (32bit) / 2013 (32bit) / 2010 (32bit) / 2007 installed (full UNICODE compatibility ensured)
  - ✓ Additional DCOM rights set

IMPORTANT NOTE: Automated archiving is designed for groups. It is therefore crucial to have Active Directory groups synchronized with Archive Manager, or at least to create new Archive Manager groups using the **Addressbook Manager**. In Archive Manager, the jobs (automated archiving) apply to groups. Mailboxes not included in any group can be archived manually only.

After Installation

When you have completed this check list and installed everything as described in this manual, log on to the Archive Manager Server as the super-user and open Outlook. Add a few test mailboxes and send a couple of emails, in order to see if you can read them. This way you can check if the super-user has the necessary rights for archiving to function properly.

Office 365 Configuration Details

Archive Manager requires specific connection configuration details to import your o365 users. This section will guide you through the steps to be completed in your o365 in order to collect the necessary

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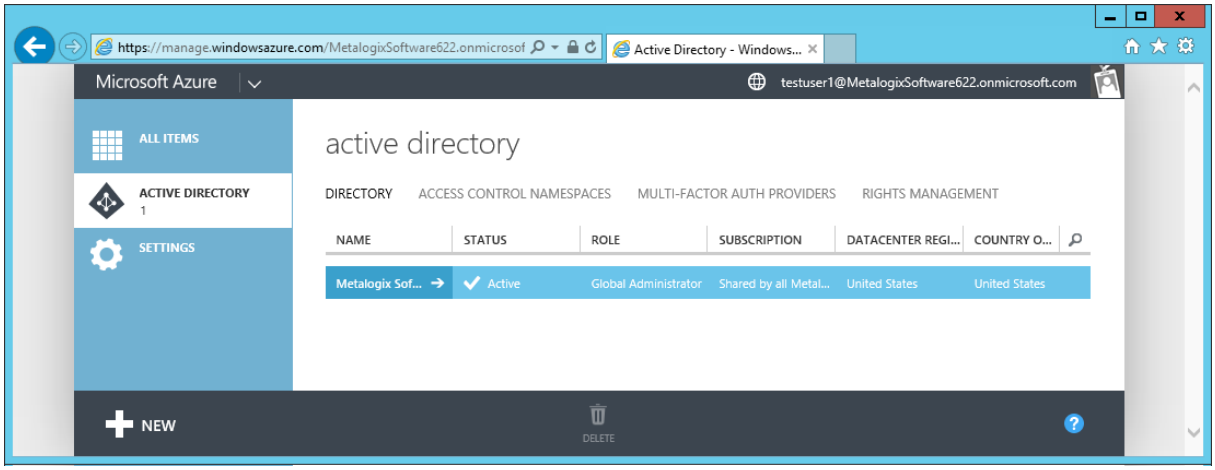
data:

Organization Name in Office 365 – your organization in Office 365
Client ID – get this ID by following the process described below
Client Secret (or *Key*) – get this key by following the process described below
Autodiscovery Url – to get this URL, go to https://testconnectivity.microsoft.com/, select the *Outlook Autodiscover* option; click Next and perform the test with your details; As a result you should get the URL
Username & Password – the respective user must be Office 365 administrator

VERY IMPORTANT: In case of Office 365, run the EM with the super-user under which Archive Manager has been installed (i.e. the user under which MAM services run).

NOTE: This sample will not work with a Microsoft account, so if you signed in to the Azure portal with a Microsoft account and have never created a user account in your directory before, you need to do that now. If you create an account and want to use it to sign-in to the Azure portal, don't forget to add the user account as a co-administrator of your Azure subscription.

1. Sign in to the Azure management portal.
2. Click on **Active Directory** in the left hand nav.



3. Click the directory tenant which you plan to archive with Archive Manager.
4. Click the **Applications** tab. In the drawer, click **Add**.

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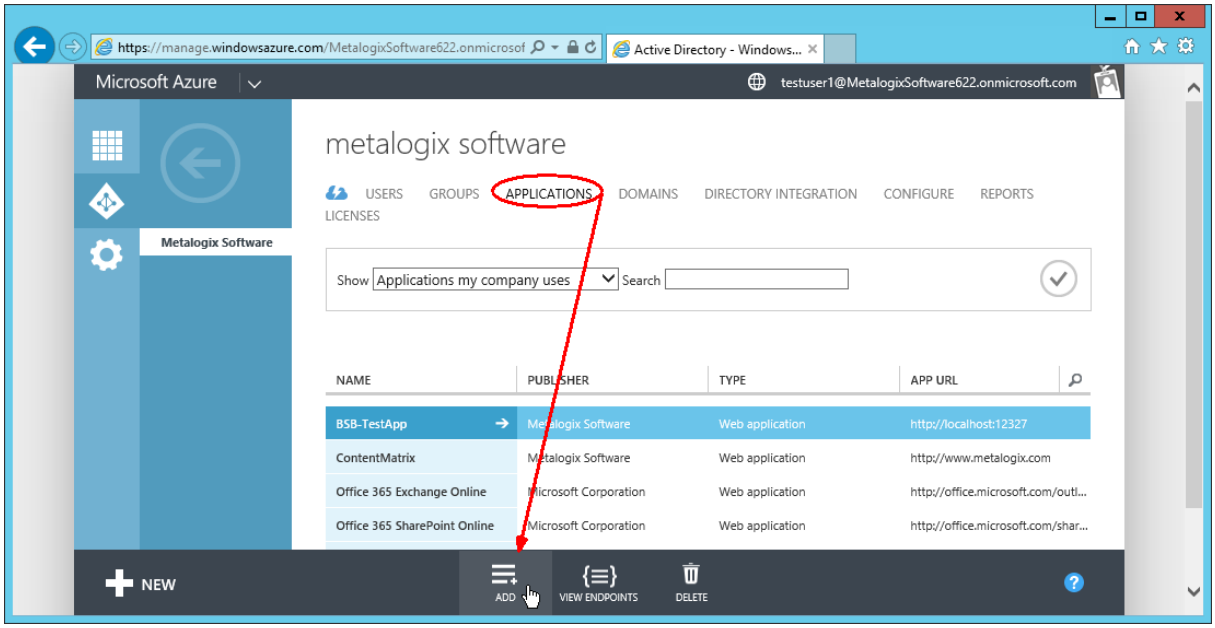
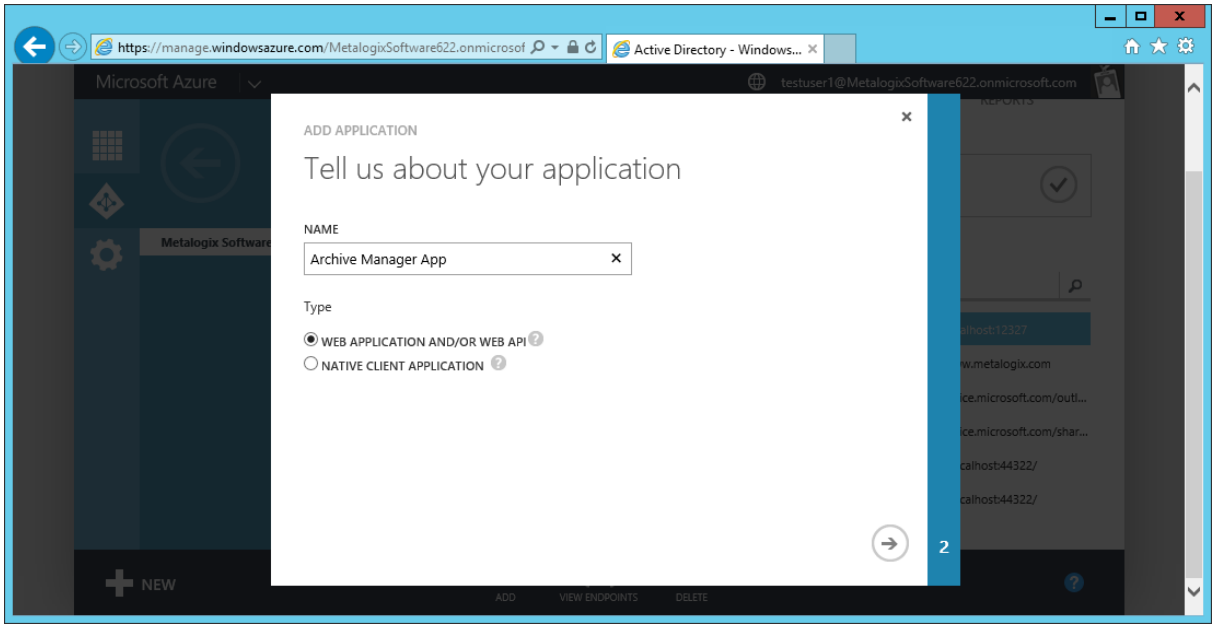


5. Click **Add an application my organization is developing**.

6. Enter a friendly name for the application, for example "Archive Manager App", select **Web Application and/or Web API**, and click next.



7. For the **sign-on URL**, enter the base URL for the sample, which is by default `https://localhost:44322/`.

   NOTE: It is important, due to the way Azure AD matches URLs, to ensure there is a trailing slash on the end of this URL. If you don't include the trailing slash, you will receive an error when the

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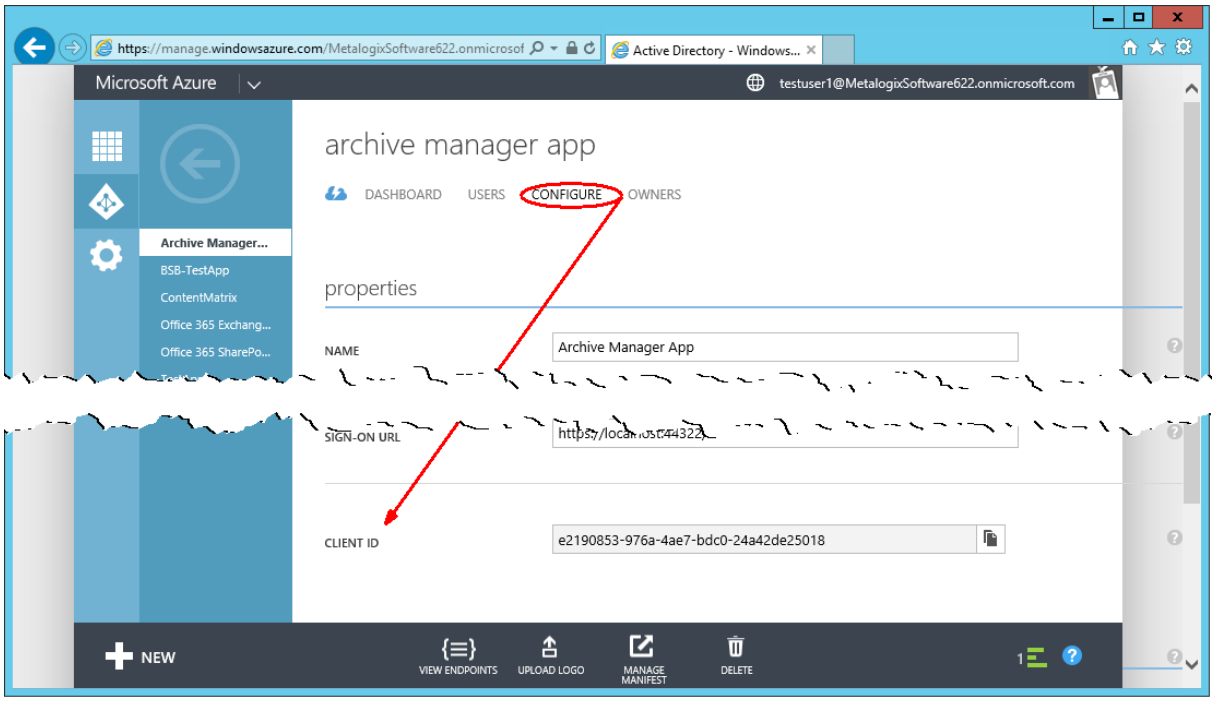
application attempts to redeem an authorization code.

8. For the **App ID URI**, enter `https://<your_tenant_name>/WebAppGraphAPI`, replacing `<your_tenant_name>` with the domain name of your Azure AD tenant. For example `https://metalogix.com/WebAppGraphAPI`. Click **OK** to complete the registration.

9. While still in the Azure portal, click the **Configure** tab of your application. Find the **Client ID** value and copy it aside, you will need this when connecting to o365 in Archive Manager.



10. Under the **Keys** section, select either a 1 year or 2 year key - the key value will be displayed after you save the configuration at the end.

    In the **Reply URL**, add the reply URL address used to return the authorization code returned during Authorization code flow. For example: `https://localhost:44322/`.

    Configure Permissions - under the **Permissions to other applications** section, select application "Windows Azure Active Directory", and under the second permission (Delegated permissions), select "Access your organization's directory" and "Enable sign-on and read users' profiles". The 2nd column (Application permission) is not needed.

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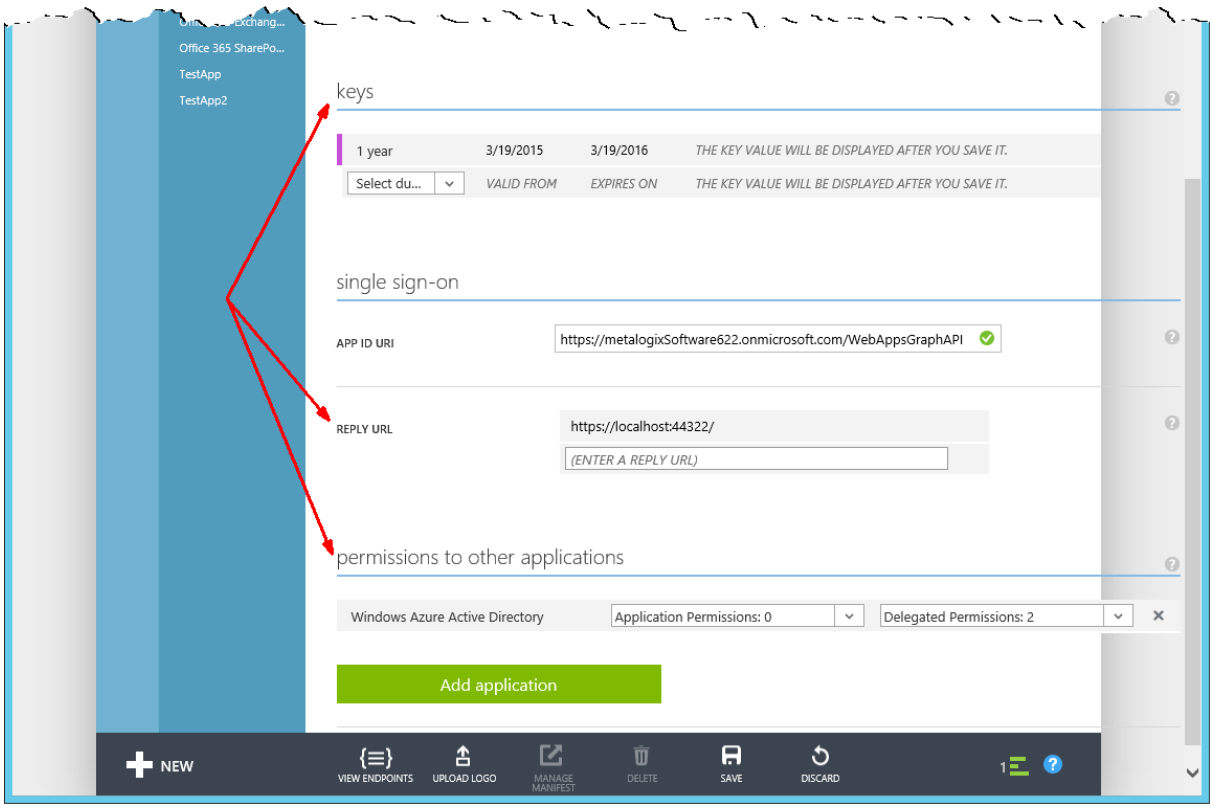

11. Select the **Save** button at the bottom of the screen - upon successful configuration, your **Key** value (aka ClientSecret in Archive Manager) should now be displayed - please copy and store this value in a secure location. The key value is only displayed once, and you will not be able to retrieve it later.

    NOTE: The permission "Access your organization's directory" allows the application to access your organization's directory on behalf of the signed-in user - this is a delegation permission and must be consented by the Administrator for web apps (such as this demo app). The permission "Enable sign-on and read users' profiles" allows users to sign in to the application with their organizational accounts and lets the application read the profiles of signed-in users, such as their email address and contact information - this is a delegation permission, and can be consented to by the user. The other permissions, "Read Directory data" and "Read and write Directory data", are Delegation and Application Permissions, which only the Administrator can grant consent to.

Advanced Authentication

Archive Manager Exchange Edition supports also access to Azure AD in case when user account name and password are needed (advanced authentication) for retrieval of user accounts and groups in Azure AD. This chapter describes the user interface and configuration of this feature in Archive Manager.

Advanced authentication is normally not required and must be configured on both Azure AD and

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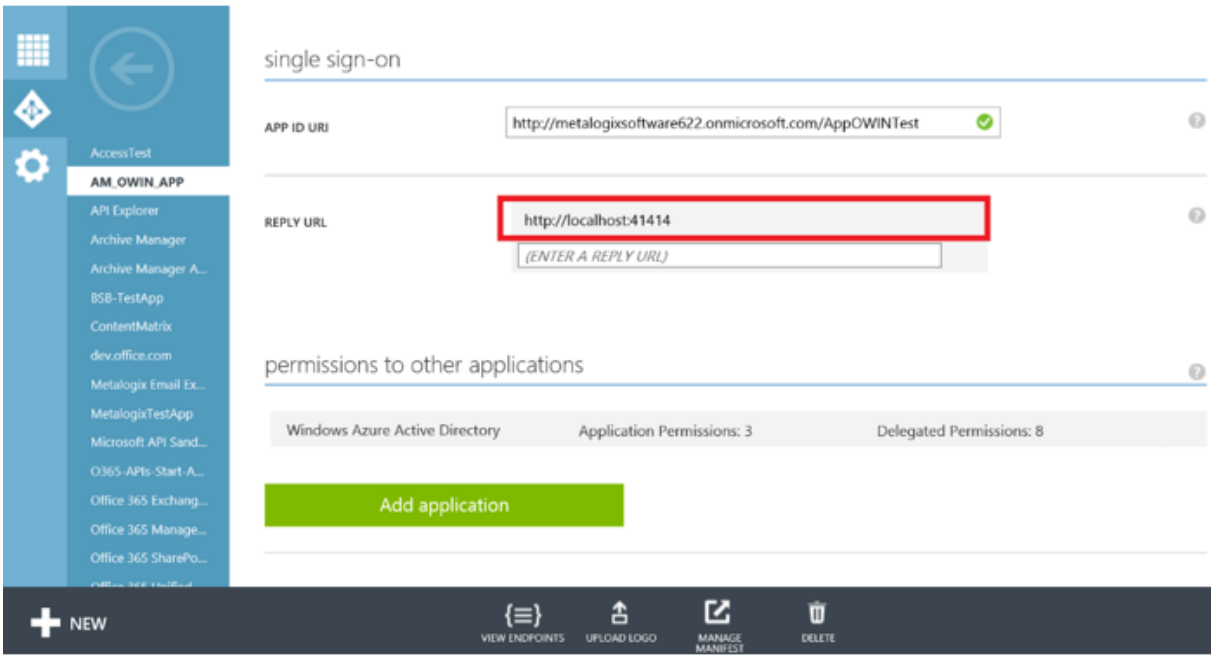
Archive Manager Exchange Edition.

Configuration in Azure AD

User creates web application as described in https://msdn.microsoft.com/en-us/library/dn985955.aspx

There is one more important step include and it is setup of reply URL, in example below it is: http://localhost:41414.



Configuration in Archive Manager

Advanced authentication is implemented in Archive Manager in two components:

Back-end is in *MAM Exchange Direct Archive Error Monitoring* service which contains a web application waiting for responses on location specified in registry key: **Metalogix\exchangePAM \OwinAuthWebAppLocation**. It needs to match reply URL in Azure AD web application and it needs to end with character /. The URL from example above is then: http://localhost:41414/

Front-end is located in Enterprise Manager which authenticates user on Azure AD server and waits for security token which is send from Azure AD server to Archive Manager back-end.

Tips & Tricks: If there is a problem with retrieval of security token it is recommended to restart *MAM Exchange Direct Archive Error Monitoring* service and restart Enterprise Manager. Also check the registry key **Metalogix\exchangePAM\OwinAuthWebAppLocation** (as described above).

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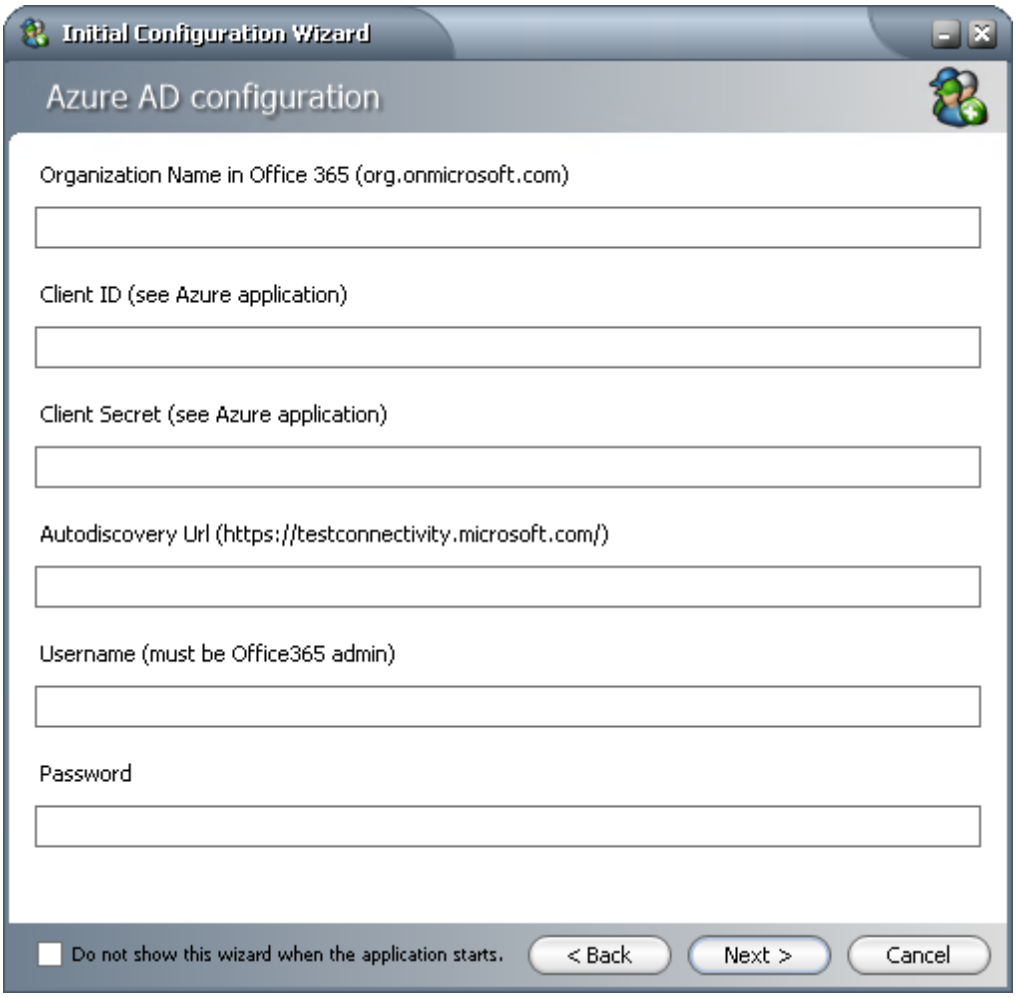
Advanced Authentication is UI

User interface contains intermediate window which will retrieve security token when required during new server, group or mailbox add operation (see "*Importing users to Archive Manager Exchange Edition*"). After retrieval of security token user can continue as usually. New user interface for Advanced authentication will be described on new server add operation below.

NOTE: Retrieval of security token is made only when necessary therefore this feature is not applicable for majority of user.

When importing Azure AD in Archive Manager Addressbook (see the section "*Importing MS Exchange Servers to Archive Manager Exchange Edition*") the following configuration window appears.


Initial Configuration Wizard
Azure AD configuration
Organization Name in Office 365 (org.onmicrosoft.com)
Client ID (see Azure application)
Client Secret (see Azure application)
Autodiscovery Url (https://testconnectivity.microsoft.com/)
Username (must be Office365 admin)
Password
Do not show this wizard when the application starts.
< Back
Next >
Cancel

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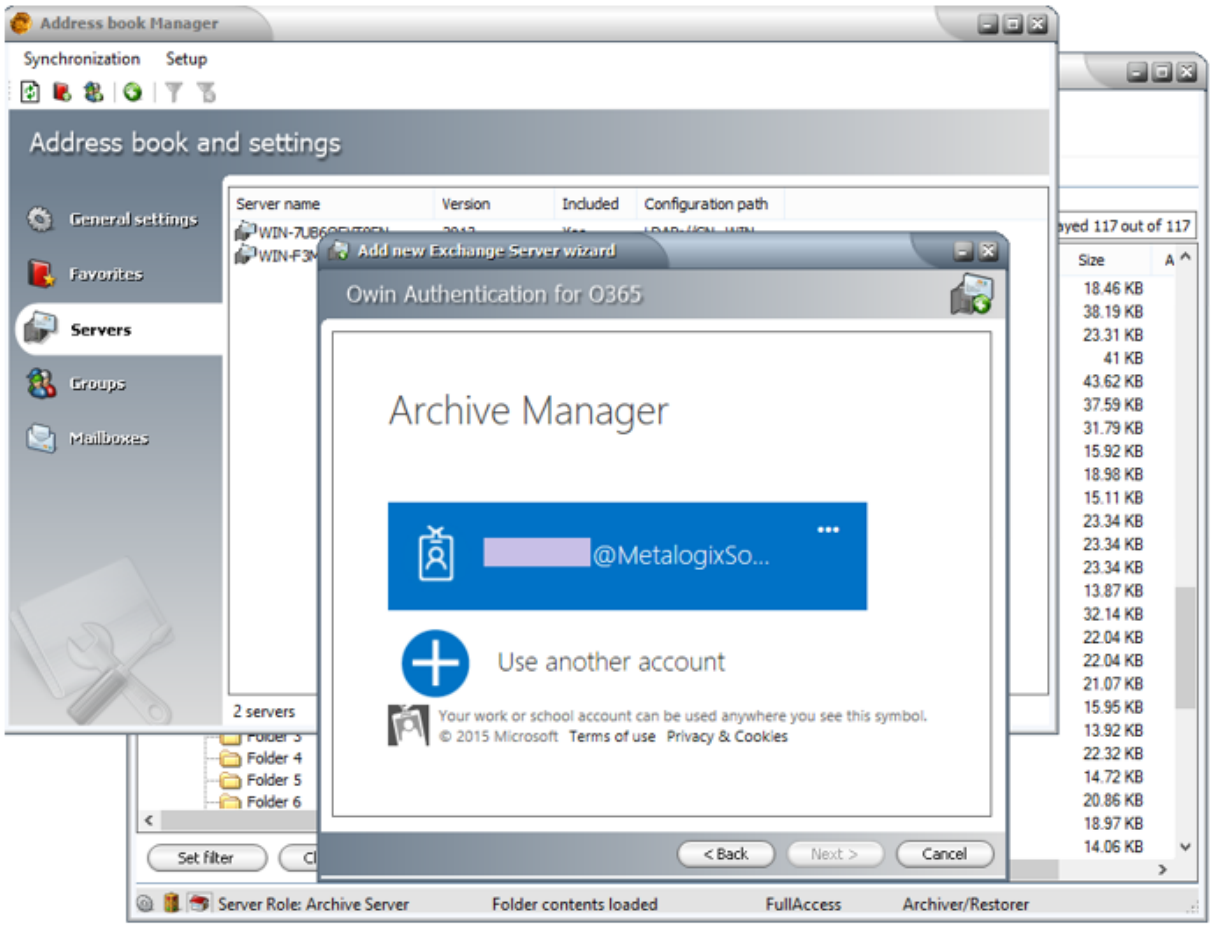
After setting the necessary information additional authentication window may appear as in example below:



User chooses administrator account and fills in password and submits the login form by clicking Sign in.

Archive Manager communicates with Azure AD server to obtain required security token for communication between Archive Manager and Azure AD. This communication can take cca 30 seconds and during this time the login should not be closed. When security token was successfully processed, "success" message appears.

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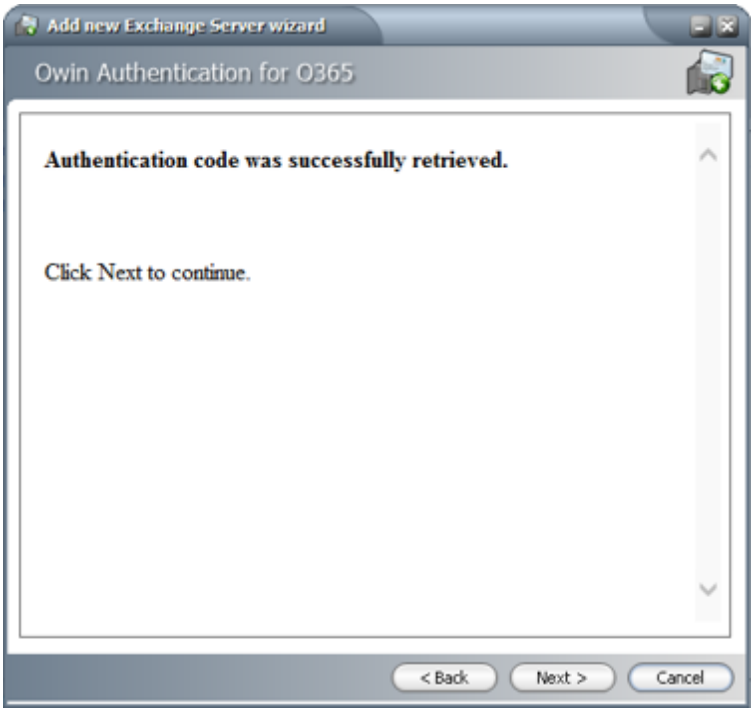

By clicking **Next** original window with information about O365 tenant appears.

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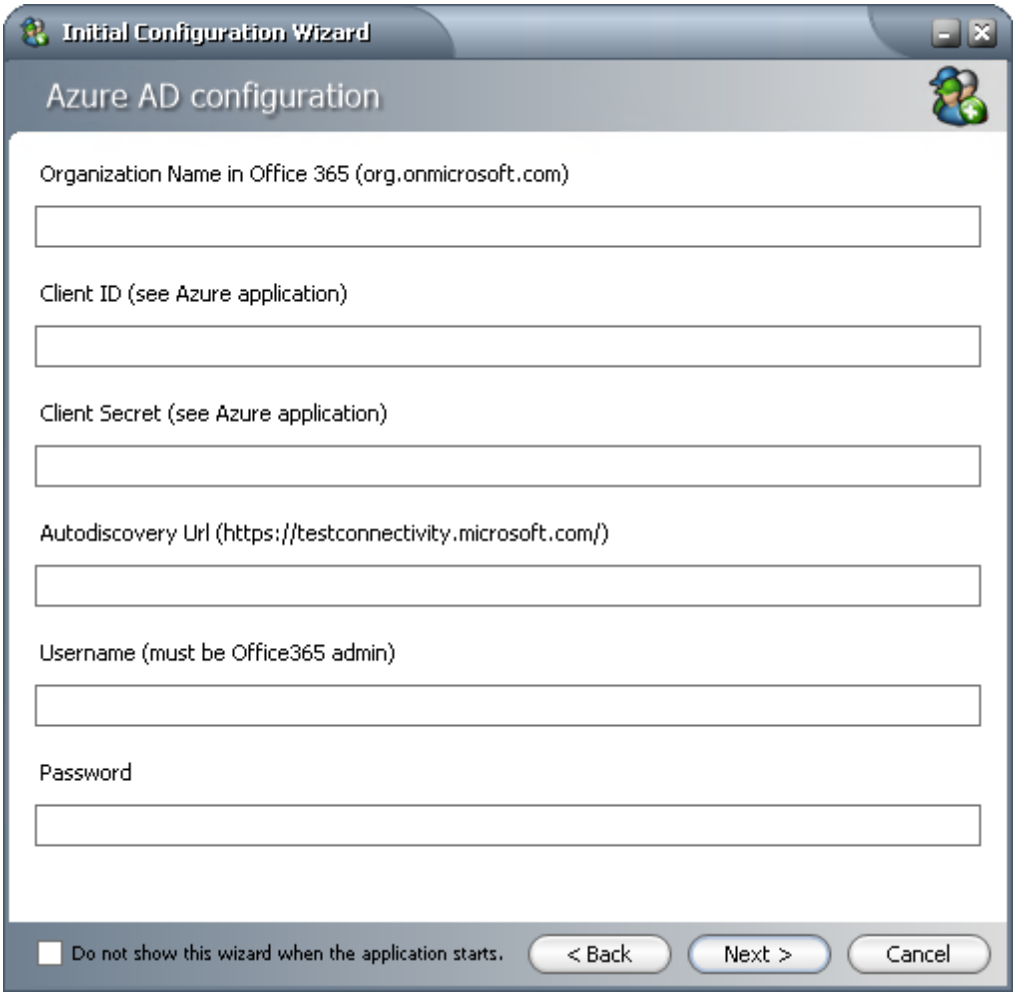
Initial Configuration Wizard
Azure AD configuration
Organization Name in Office 365 (org.onmicrosoft.com)
Client ID (see Azure application)
Client Secret (see Azure application)
Autodiscovery Url (https://testconnectivity.microsoft.com/)
Username (must be Office365 admin)
Password
Do not show this wizard when the application starts.
< Back
Next >
Cancel

Security token will be used for retrieval of information from Azure AD.

NOTE: Security token must be provided always when application is communicating with Azure AD, i.e. during adding of O365 groups or O365 mailboxes procedure. This is also reason why automatic synchronization of groups and mailboxes from Azure AD will not work. Therefore it is recommended to use default authentication which does not require usage of security tokens.

Creating an MS SQL database with a database user

When planning to install Archive Manager, an empty database(s) and an appropriate database user must be created before running the setup. The database providers supported by Archive Manager are MS SQL Server 2008 and higher and Oracle 11g and 12c.

NOTE: This section guides you through the configuration of SQL Server 2012 and creation of a

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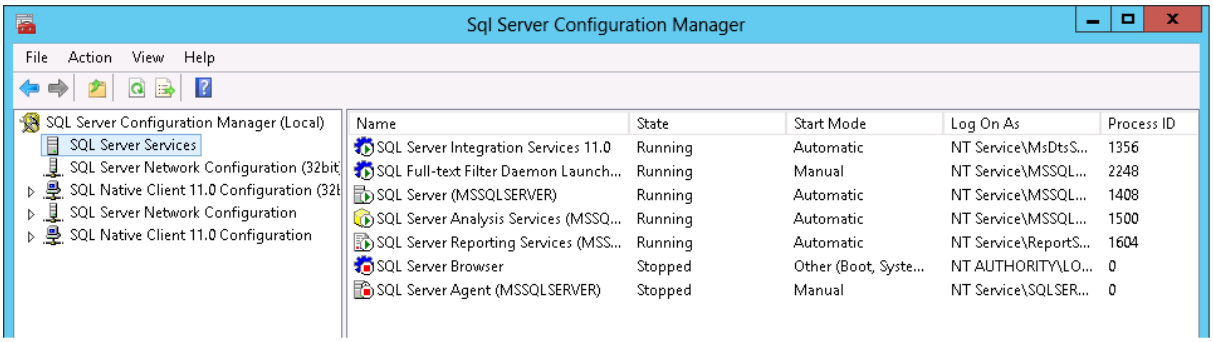
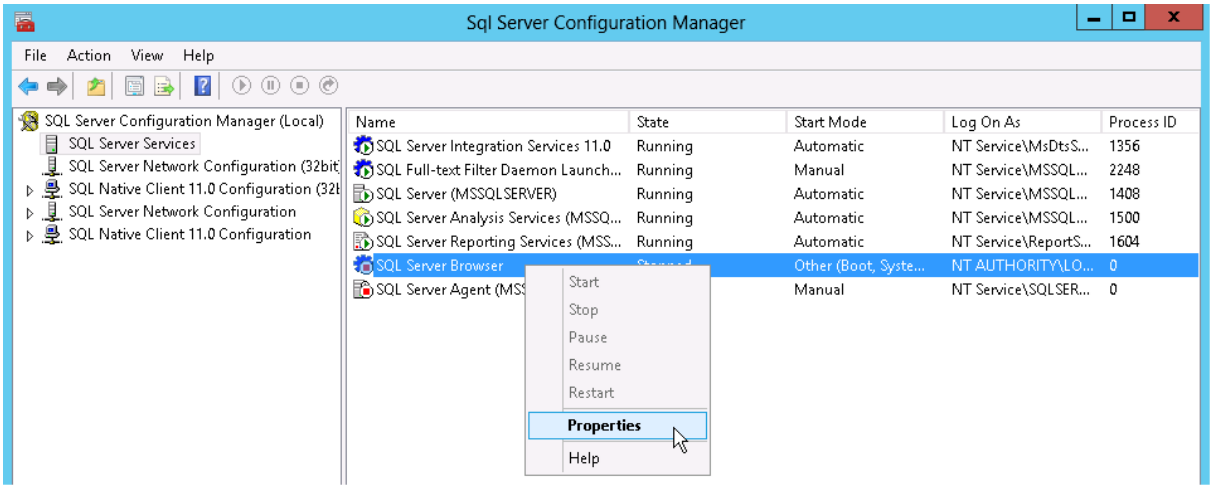
database with a database user. In case of SQL 2008 you can use the "SQL Server 2008 Configuration for Archive Manager" guide.

To configure your SQL Server 2012:

1. Open the **SQL Server Configuration Manager** and click the **SQL Server Services** node. Both the **SQL Server (SERVERNAME)** and the **SQL Server Browser** services have to run.


Sql Server Configuration Manager
File Action View Help
SQL Server Configuration Manager (Local)
SQL Server Services
SQL Server Network Configuration (32bit)
SQL Native Client 11.0 Configuration (32
SQL Server Network Configuration
SQL Native Client 11.0 Configuration
Name State Start Mode Log On As Process ID
SQL Server Integration Services 11.0 Running Automatic NT Service\MsDtsS... 1356
SQL Full-text Filter Daemon Launch... Running Manual NT Service\MSSQL... 2248
SQL Server (MSSQLSERVER) Running Automatic NT Service\MSSQL... 1408
SQL Server Analysis Services (MSSQ... Running Automatic NT Service\MSSQL... 1500
SQL Server Reporting Services (MSS... Running Automatic NT Service\ReportS... 1604
SQL Server Browser Stopped Other (Boot, Syste... NT AUTHORITY\LO... 0
SQL Server Agent (MSSQLSERVER) Stopped Manual NT Service\SQLSER... 0

2. If the **SQL Server Browser** service is not started and the **Start** option available in its context menu, it means that this service is disabled. To enable the service, right-click it and from the context menu select **Properties**.


Sql Server Configuration Manager
File Action View Help
SQL Server Configuration Manager (Local)
SQL Server Services
SQL Server Network Configuration (32bit)
SQL Native Client 11.0 Configuration (32
SQL Server Network Configuration
SQL Native Client 11.0 Configuration
Name State Start Mode Log On As Process ID
SQL Server Integration Services 11.0 Running Automatic NT Service\MsDtsS... 1356
SQL Full-text Filter Daemon Launch... Running Manual NT Service\MSSQL... 2248
SQL Server (MSSQLSERVER) Running Automatic NT Service\MSSQL... 1408
SQL Server Analysis Services (MSSQ... Running Automatic NT Service\MSSQL... 1500
SQL Server Reporting Services (MSS... Running Automatic NT Service\ReportS... 1604
SQL Server Browser Other (Boot, Syste... NT AUTHORITY\LO... 0
SQL Server Agent (MS Manual NT Service\SQLSER... 0
Start
Stop
Pause
Resume
Restart
Properties
Help

3. The **Properties** window opens. Switch over to the **Service** tab and change the **Start Mode** from **Disabled** to **Manual**. Conclude by clicking **Apply** and **OK** and then try to start the service again.

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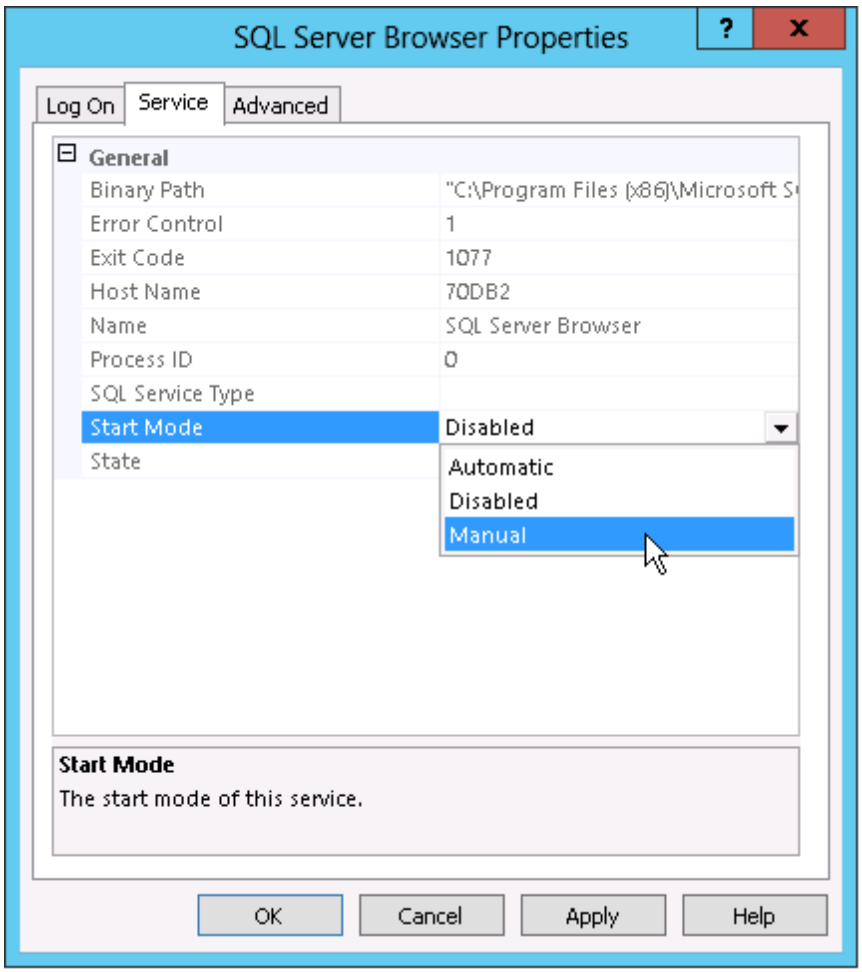
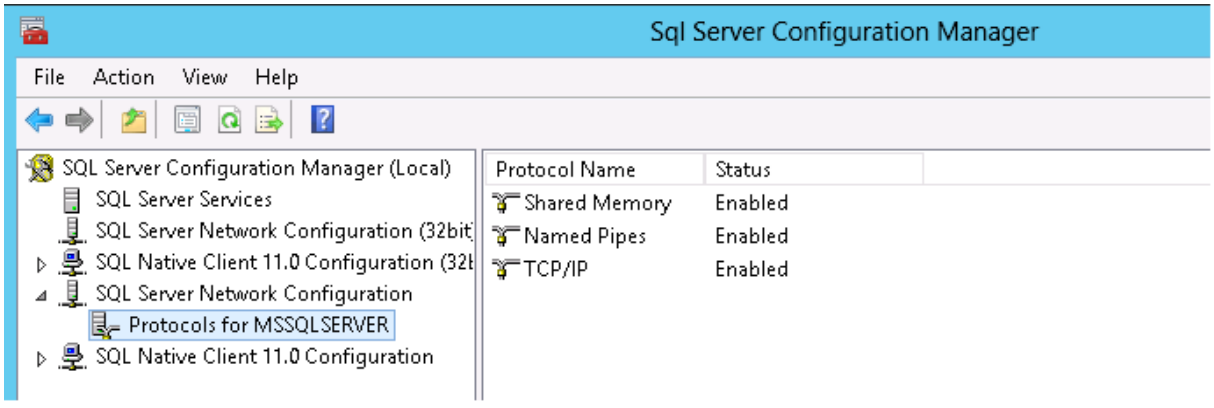


4. In the **SQL Server Configuration Manager** expand the **SQL Server Network Configuration** node from the navigation tree. On the **Protocols for SQL** node you need to enable the **Named Pipes**, the **Shared Memory** and the **TCP/IP protocols**.



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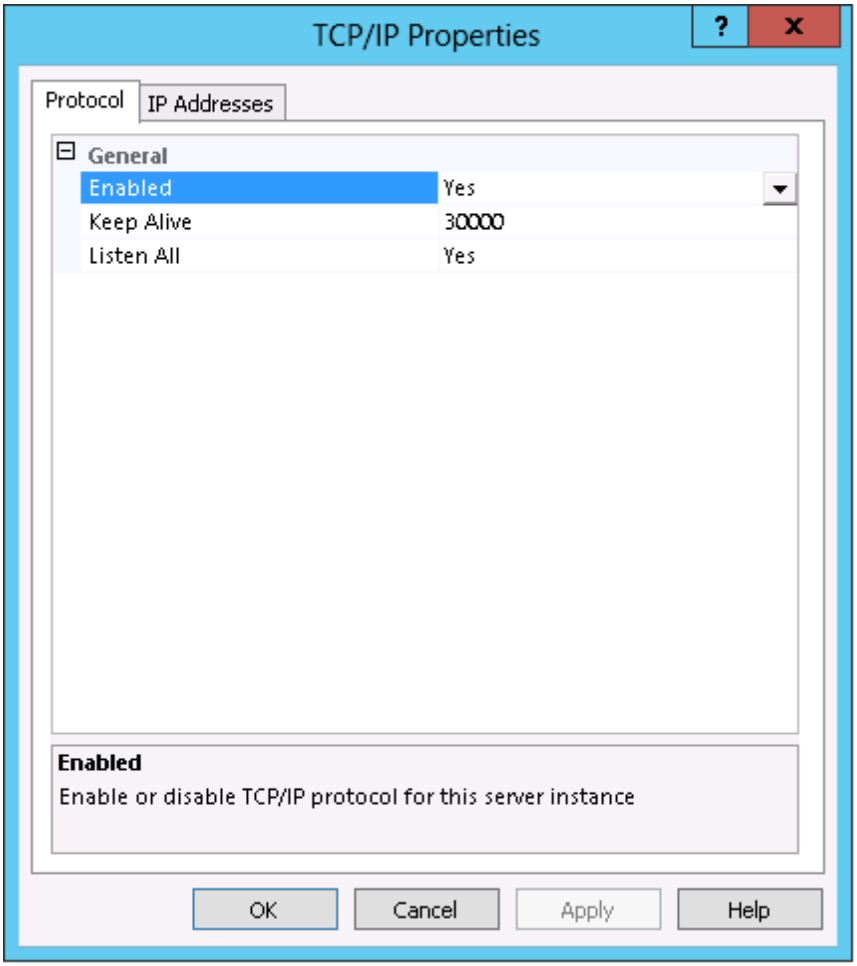
5. Instead of enabling the **TCP/IP** using the context menu, we recommend opening its **Properties** window. This window has two tabs, **Protocol** and **IP Addresses**. On the **Protocol** tab set the **Enabled** to **Yes**.



6. On the IP Addresses tab you will see several sections - one for each network connection and a local loopback connection indicated by the standard address of 127.0.0.1 For remote access to the SQL Server Express 2012 instance the loopback connection is of no interest.

   For the desired network connection the **Active** option should say **Yes** as should the **Enabled** option. The IP address will probably be filled in for you (by Windows) and will be different on your machine.

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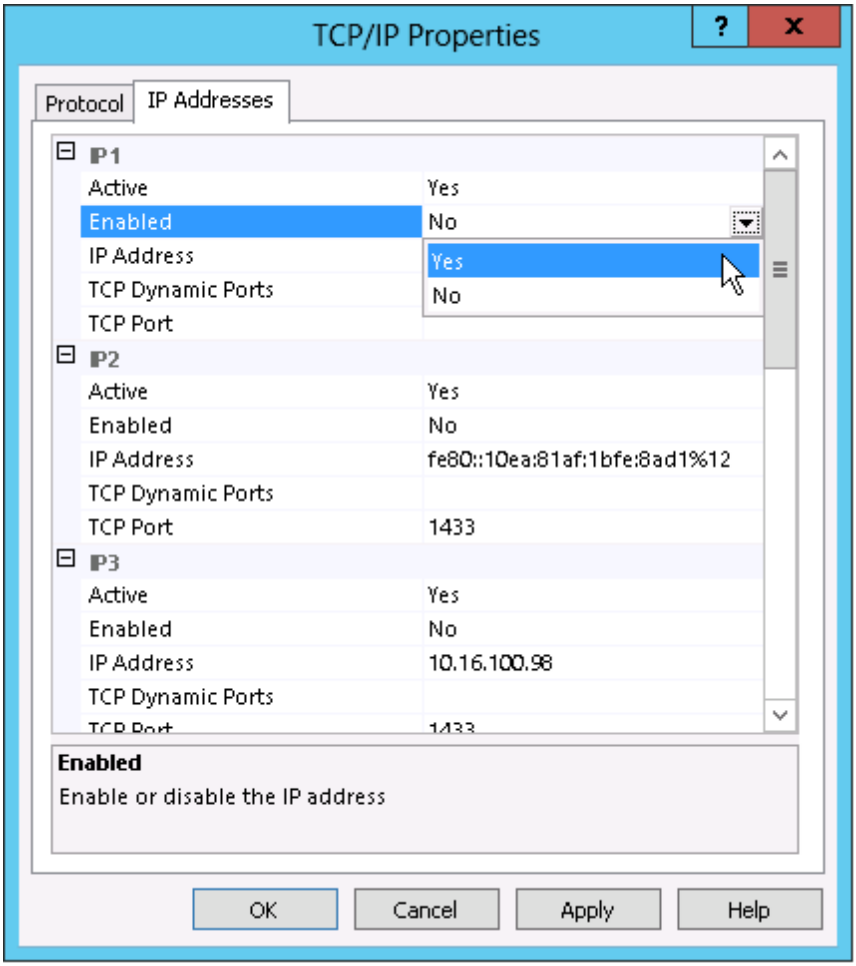

If you wish to enable dynamic ports for your SQL Server Express 2012 instance then the **TCP Dynamic Ports** option should be **0**. To disable this option and use a fixed port change this field to a blank value and fill in the port on the **TCP Port** option. Disabling dynamic ports is non standard for named instances and should really only be done if you know exactly what you are doing and why you want to do it.

Conclude by clicking **Apply** and then **OK**.

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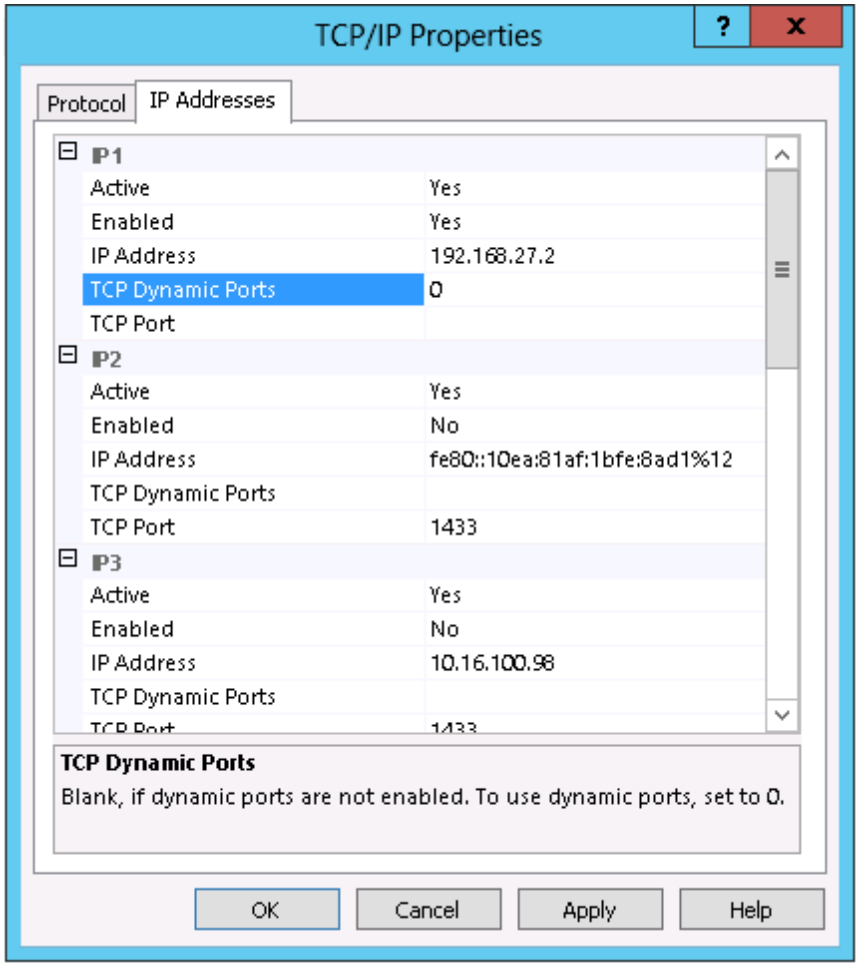
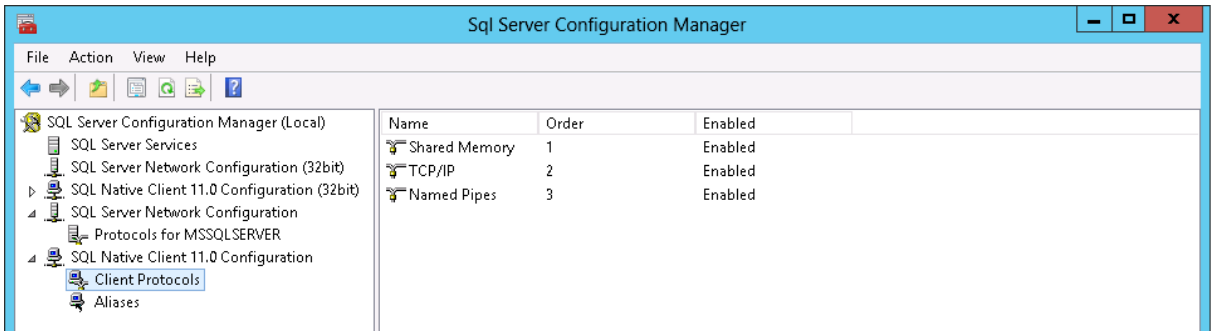


7. For the changes to take effect you need to restart both the **SQL Server (SERVERNAME)** and **SQL Server Browser** services have to be restarted switching over to the **SQL Server Services** node.

8. Check the **Shared Memory**, the **TCP/IP** and the **Named Pipes** client protocols on the **SQL Native Client Configuration** node in the **SQL Server Configuration Manager** too. They should all be enabled.



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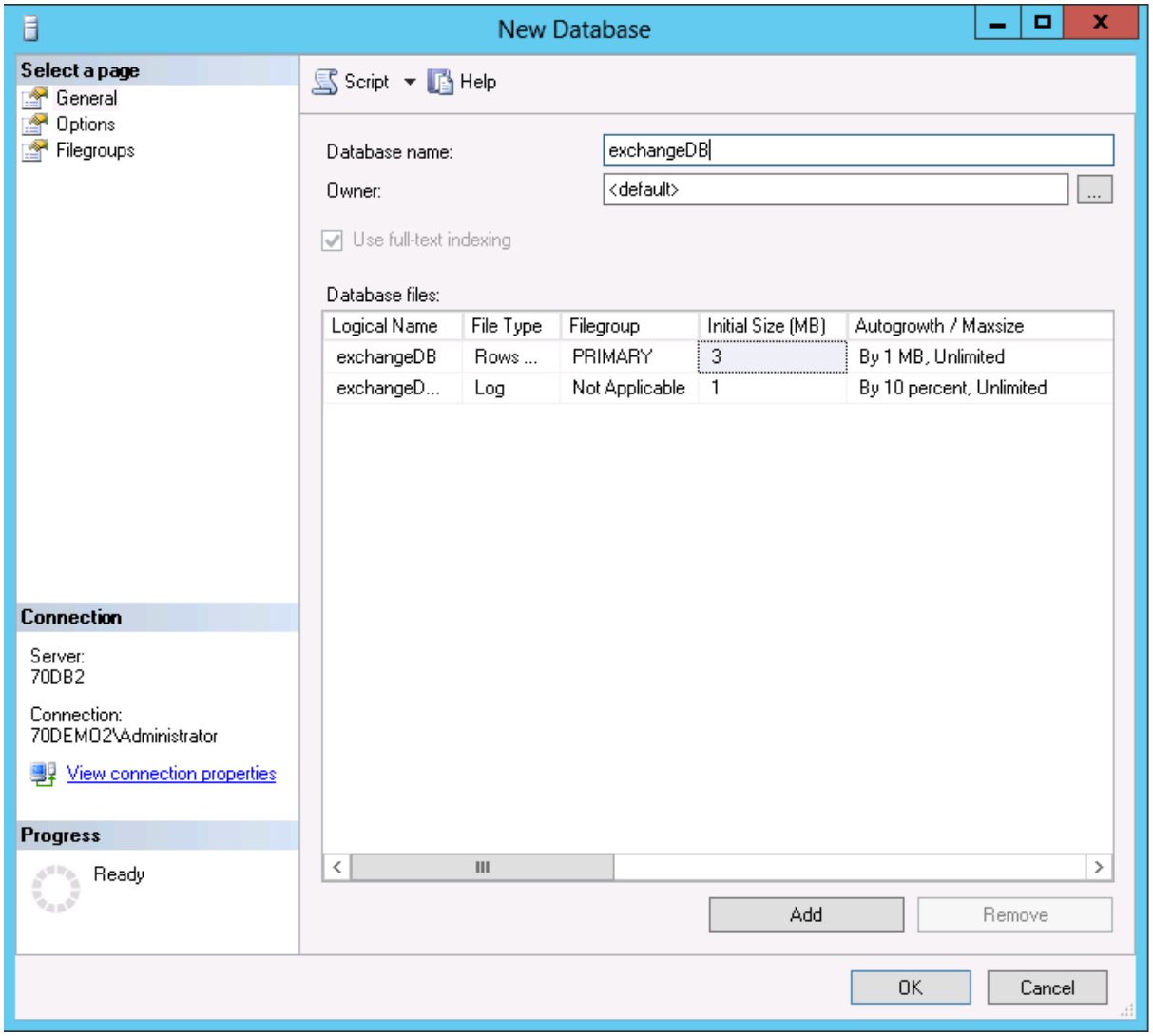
Furthermore you will need to create an empty database and a database user for your Archive Manager. To do so:

1. Connect to your SQL Server 2012 with the **Microsoft SQL Server Management Studio**, then expand its tree and right-click on the **Databases** node. From the context menu choose to create a new database.

2. In the **New Database** dialog, give the new database a name (e.g. exchangeDB) and you can leave the owner to be the <default>. This owner will be changed later on, when you will create a new login with table owner rights over the database you are creating. You can also choose to change the default location for the Data file and Log file, if needed. Finish by clicking **OK**.



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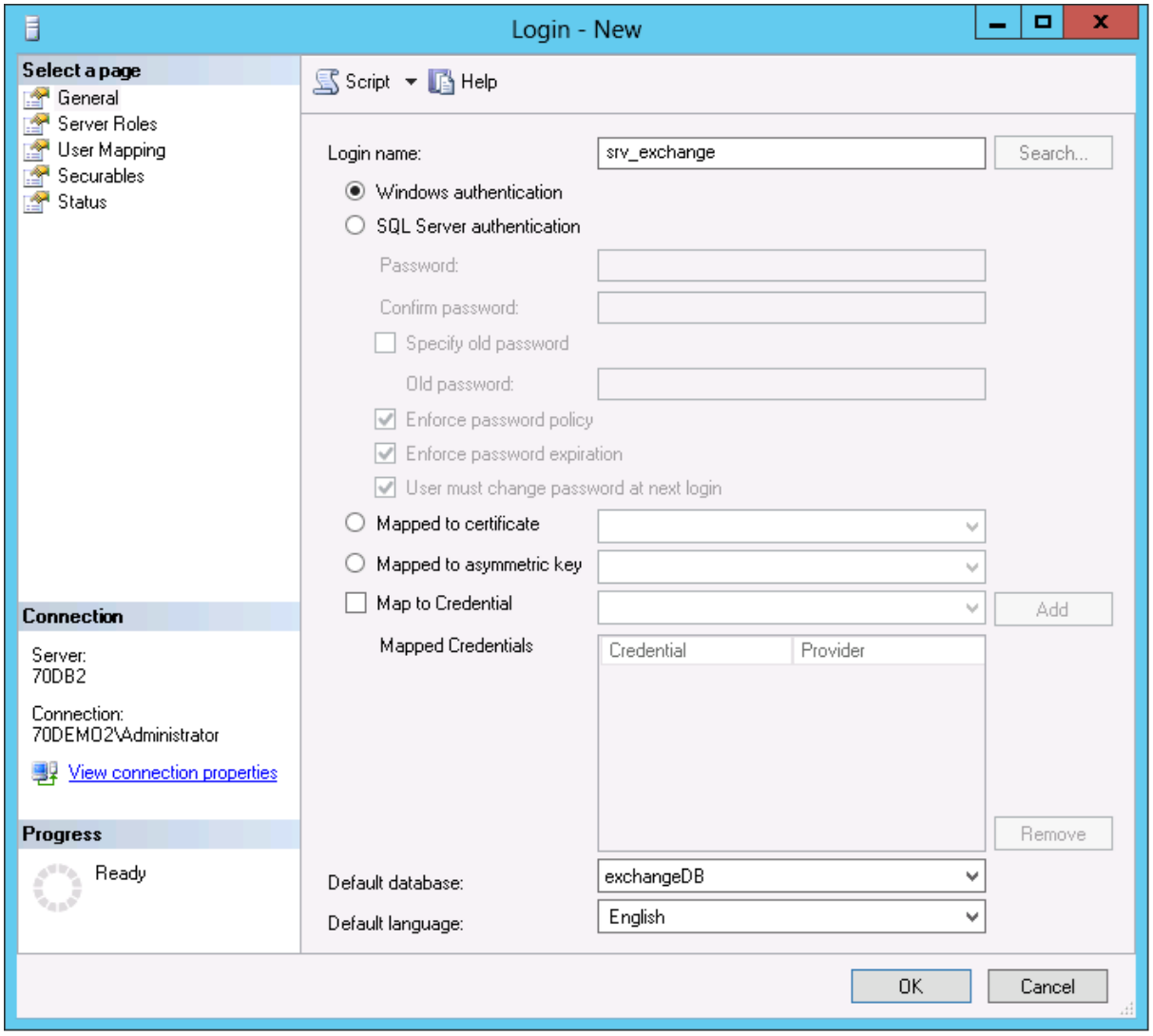
3. To create the Table Owner for the exchangeDB database you will need to create a new login, a new scheme and a new user as well. We will name each of them "srv_exchange".

   To create a new login, expand the tree of the **MS SQL Server Management Studio** tool and right-click on the **Security** tab and choose **New/Login**.

4. The new dialog opens. Before proceeding further on the **General** tab decide on the type of authentication to be used:

   Windows authentication - the user (e.g. "srv_exchange") must already exist in the Active Directory. Use the **Search** button to find your desired user in AD. It can be your Archive Manager super-user as is described in the section "Creating a super-user account".

   SQL authentication – specify the login name ("srv_exchange" in our example). Make sure to **uncheck** the **Enforce password policy** check box.



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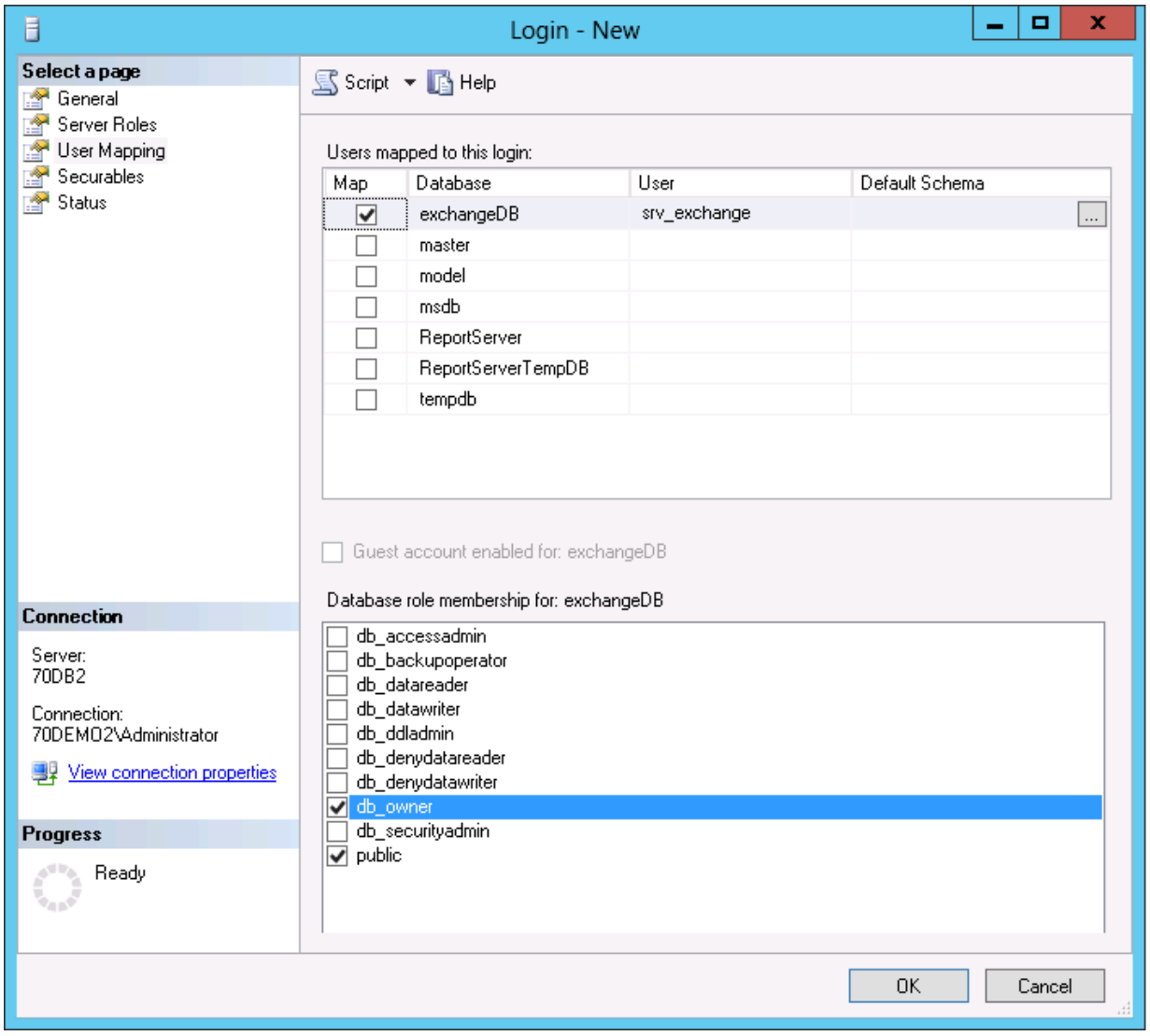
As for the **Default database**, select the exchangeDB database and set the **Default language** to be English.

5. Once this is done, you can switch over to the **User Mapping** tab. Here map to the *exchangeDB* database a user (it will be automatically created and named with the same name as the login) and select also the **db_owner** and **public** membership role for the *exchangeDB* database.



6. Switching over to the **Status** tab. Make sure that the *Permission to connect to database engine* is **granted** and also that the *Login* is **enabled**. Conclude by clicking **OK**.

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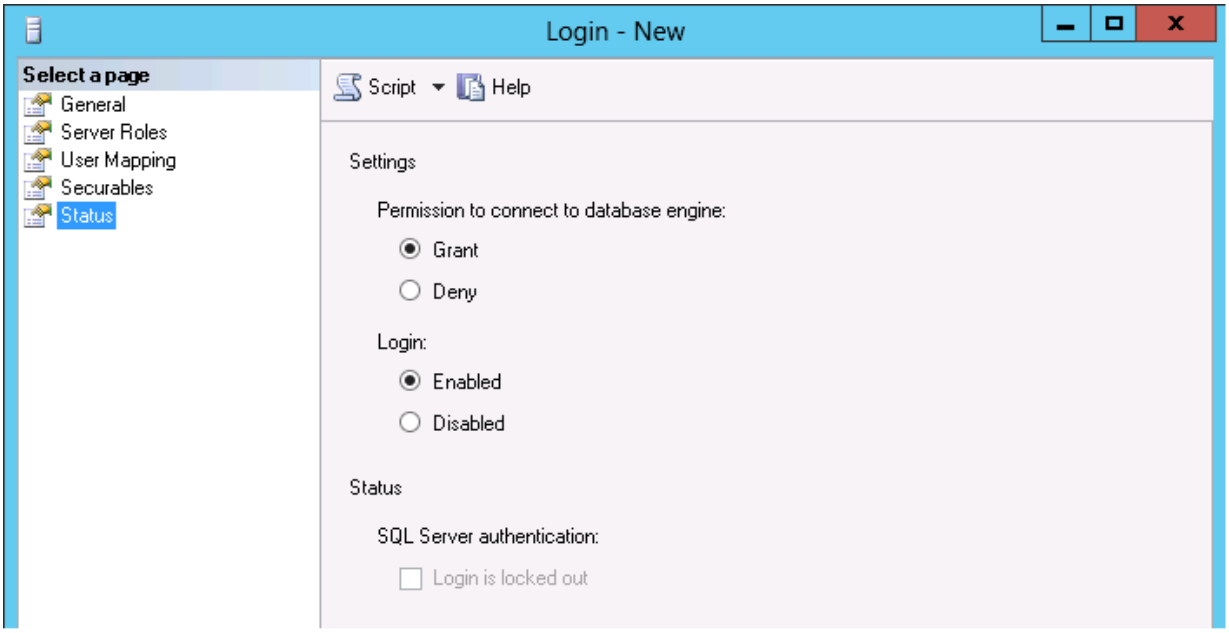

7. Next you will need to create a schema for your new database login. To do so, expand the tree on the new created database (*exchangeDB*) in the **Microsoft SQL Server Management Studio** tool down to **Security/ Schemas**. Right-click on **Schemas** and choose **New Schema** from the context menu.

   In the **New schema** dialog just give a name to the schema you want to create (e.g. *srv_exchange*) and click the **Browse** button to select the schema owner. Select the schema owner to be the previous user you have specified in step 4 (*srv_exchange*). Click **OK**.

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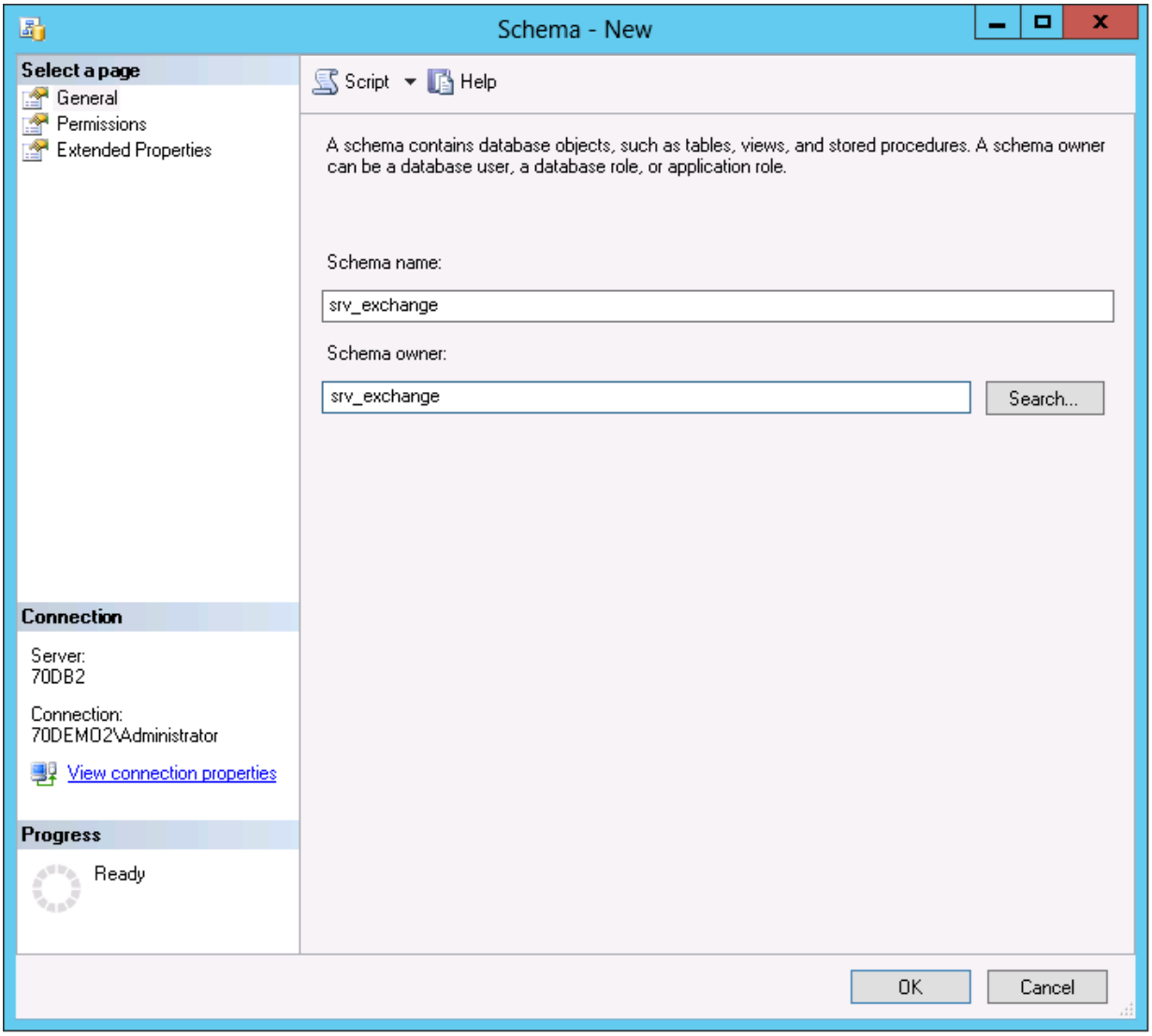

8. Furthermore you will need to assign the new created schema to your new database user. The new database user (*srv_exchange*) was automatically created when creating the new login and mapping a user to the exchangeDB database.

   To locate this new user, expand the tree of the **exchangeDB** database in the **MS SQL Server Management Studio** tool down to **Security/Users**.

   By clicking on the **Users** node you will see the user called srv_*exchange* on the right pane of the tool. Double-click on it to open its **Properties** window.

   A new dialog opens on the **General** tab. Click the browse button next to the **Default Schema** text box and select the previously created user "**srv_exchange**".

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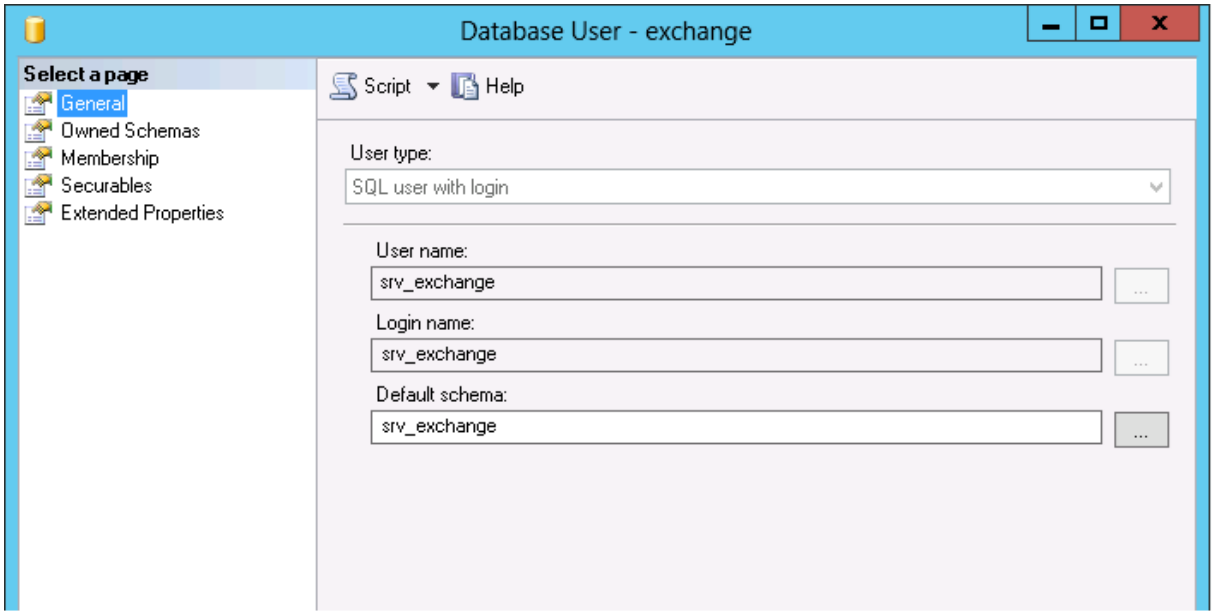
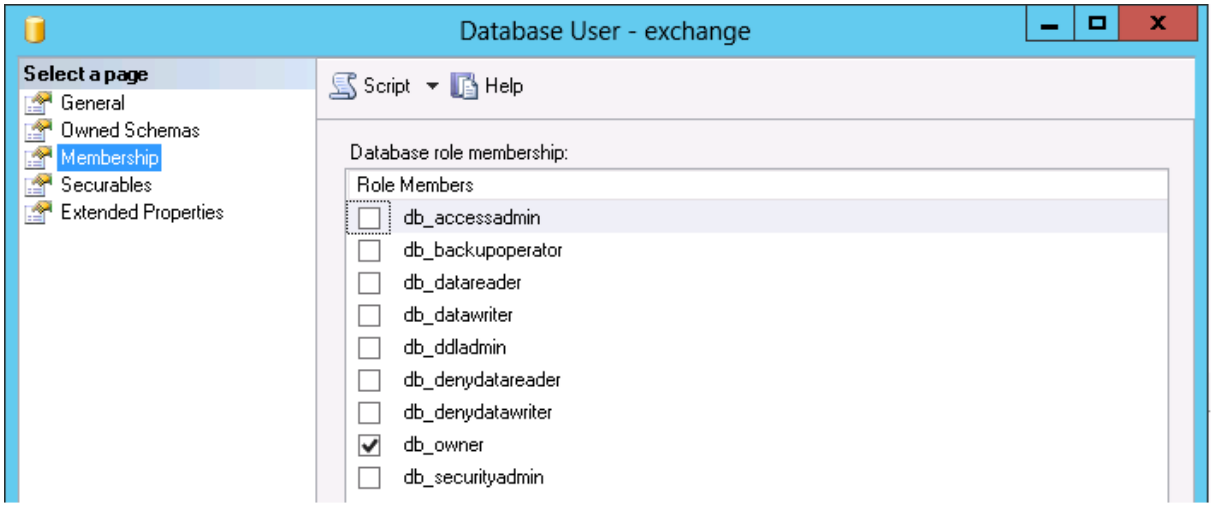


9. Switch to **Owned Schemas** node where you will see that the one called srv_*exchange* is selected. Make sure that the **db_owner** is selected too.

   Now switch to the **Membership** node and make sure that **db_owner** is selected here, too. Save the changes you have made by clicking **OK**.



Metalogix makes every effort to perform comprehensive testing but cannot guarantee, due to environmental differences, that all functions will work in every environment. It is always recommended that testing be conducted within your own environment to confirm functionality and compatibility.

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